

**Iowa Department of Natural Resources
Title V Operating Permit**

Name of Permitted Facility: Pella Corporation – Carroll Operations

Facility Location: Carroll, Iowa

Air Quality Operating Permit Number: 98-TV-025R1-M002

Expiration Date: October 3, 2010

EIQ Number: 92-4046

Facility File Number: 14-01-010

Responsible Official

Name: Denny Van Zanten

Title: Group Vice President - Manufacturing

Mailing Address: 102 Main Street, Pella, Iowa 50219

Phone #: (641) 621-1000

Permit Contact Person for the Facility

Name: Terry Noteboom

Title: Environmental Engineer

Mailing Address: 102 Main Street, Pella, Iowa 50219

Phone #: (641) 621-6266

This permit is issued in accordance with 567 Iowa Administrative Code Chapter 22, and is issued subject to the terms and conditions contained in this permit.

For the Director of the Department of Natural Resources

Douglas A. Campbell, Supervisor of Air Operating Permits Section

Date

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Abbreviations

acfm.....	actual cubic feet per minute
CFR.....	Code of Federal Regulation
CE	control equipment
CEM.....	continuous emission monitor
°F.....	degrees Fahrenheit
EIQ.....	emissions inventory questionnaire
EP.....	emission point
EU	emission unit
gr./dscf	grains per dry standard cubic foot
gr./100 cf.....	grains per one hundred cubic feet
IAC.....	Iowa Administrative Code
IDNR.....	Iowa Department of Natural Resources
MVAC.....	motor vehicle air conditioner
NAICS.....	North American Industry Classification System
NSPS.....	new source performance standard
ppmv	parts per million by volume
lb./hr.....	pounds per hour
lb./MMBtu	pounds per million British thermal units
SCC.....	Source Classification Codes
scfm.....	standard cubic feet per minute
SIC	Standard Industrial Classification
TPY.....	tons per year
USEPA.....	United States Environmental Protection Agency

Pollutants

PM.....	particulate matter
PM ₁₀	particulate matter ten microns or less in diameter
SO ₂	sulfur dioxide
NO _x	nitrogen oxides
VOC	volatile organic compound
CO.....	carbon monoxide
HAP.....	hazardous air pollutant

I. Facility Description and Equipment List

Facility Name: Pella Corporation – Carroll Operations

Permit Number: 98-TV-025R1-M002

Facility Description: Millwork (SIC 2431)

Equipment List

Emission Point Number	Emission Unit Number	Emission Unit Description	IDNR Construction Permit Number
1A	1A	Wood Paint Machine Exhaust	91-A-331-S4
1B	1B	Wood Paint Line Dryer Exhaust	01-A-862
2	2	Wood Dust System #1	82-A-054
4	4	Wood Dust System #3	87-A-070
5	5	Wood Dust System #2	87-A-093
6	6	Paint Booth Stack, Maintenance Use	91-A-035-S1
7A	7A	Wood Treat Drying Room	99-A-908-S1
7B	7B	Wood Treating - Vacuum Tank & Drying Room	96-A-1041-S2
11	11	Wood Dust System #4	91-A-136-S
12	12	Emergency Diesel Engine - Generator Exhaust Stack	94-A-094
13	13	Boiler #1 Stack	
14	14	Boiler #2 Stack	
15	15	Wood Dip/Dry Unit	99-A-900-S1
16	16	Primer Paint Kitchen	00-A-860-S3
17	17	Primer Spray Booth #1	00-A-861-S3
18	18	Primer Spray Booth #2	00-A-862-S3
19A	19A	Prime Oven Flash Zone	00-A-863-S3
19B	19B	Prime Oven Drying Zone	00-A-864-S3
19C	19C	Prime Oven Cooling Zone	00-A-865-S3
20	20	Primer Dry Filer Work Booth	00-A-866-S3
21	21	Topcoat Paint Kitchen	00-A-867-S3
22	22	Topcoat Spray Booth #3	00-A-868-S3
23	23	Topcoat Spray Booth #4	00-A-869-S3
24A	24A	Topcoat Oven Flash Zone	00-A-870-S3
24B	24B	Topcoat Oven Drying Zone	00-A-871-S3
24C	24C	Topcoat Oven Cooling Zone	00-A-872-S3
25	25	Topcoat Dry Filter Work Booth	00-A-873-S3
26	26	Fabric Filter Dust Collector - Sander System (Baghouse)	00-A-874-S1
27A	27A	UV Vacuum Coater Primer	02-A-367-S2
27C	27C	UV Cure Oven	02-A-369-S1
28A	28A	UV Vacuum Coater	04-A-452-S1
28B	28B	UV Cure Oven	04-A-453-S1
CO	CO	Catalytic Oxidizer	91-A-327-S5
Fugitive	Surface App.	Misc. Chemicals - Surface Application	

Insignificant Activities Equipment List

Insignificant Emission Unit Number	Insignificant Emission Unit Description
Insig. 1	Indoor Wood Dust Collection Systems (35 Systems)
Insig. 2	Combustion Units; Plant Heating (3 @ 6.0 MMBtu, 1 @ 0.8 MMBtu, 3@ 2.25 MMBtu)
Insig. 3	Aboveground Storage Tank (Mineral Spirits) Max. Capacity 10,000 gal.
Insig. 4	Aboveground Storage Tank (Fuel Oil for Boilers) Max. Capacity 10,000 gal.
Insig. 5	Aboveground Storage Tank (Diesel Tank on Emer. Engine Gen.) Max. Capacity 2,400 gal.
Insig. 6	Solvent Based Parts Washing
Insig. 7	Welding, Like Processes

I. Plant-Wide Conditions

Facility Name: Pella Corporation – Carroll Operations
Permit Number: 98-TV-025R1-M002

Permit conditions are established in accord with 567 Iowa Administrative Code rule 22.108

Permit Duration

The term of this permit is: 5 years
Commencing on: October 4, 2005
Ending on: October 3, 2010

Amendments, modifications and reopenings of the permit shall be obtained in accordance with 567 Iowa Administrative Code rules 22.110 - 22.114. Permits may be suspended, terminated, or revoked as specified in 567 Iowa Administrative Code Rules 22.115.

Emission Limits

Unless specified otherwise in the Source Specific Conditions, the following limitations and supporting regulations apply to all emission points at this plant:

Opacity (visible emissions): 40% opacity
Authority for Requirement: 567 IAC 23.3(2)"d"

Sulfur Dioxide (SO₂): 500 parts per million by volume
Authority for Requirement: 567 IAC 23.3(3)"e"

Particulate Matter (state enforceable only)¹:

No person shall cause or allow the emission of particulate matter from any source in excess of the emission standards specified in this chapter, except as provided in 567 – Chapter 24. For sources constructed, modified or reconstructed after July 21, 1999, the emission of particulate matter from any process shall not exceed an emission standard of 0.1 grain per dry standard cubic foot of exhaust gas, except as provided in 567 – 21.2(455B), 23.1(455B), 23.4(455B) and 567 – Chapter 24.

For sources constructed, modified or reconstructed prior to July 21, 1999, the emission of particulate matter from any process shall not exceed the amount determined from Table I, or amount specified in a permit if based on an emission standard of 0.1 grain per standard cubic foot of exhaust gas or established from standards provided in 23.1(455B) and 23.4(455B).

Authority for Requirement: 567 IAC 23.3(2)"a" (as revised 7/21/1999)

¹ Pending approval into Iowa's State Implementation Plan (SIP), paragraph 567 IAC 23.3(2)"a" (as revised 7/21/1999) is considered *state enforceable only*.

Particulate Matter²:

The emission of particulate matter from any process shall not exceed the amount determined from Table I, except as provided in 567 — 21.2(455B), 23.1(455B), 23.4(455B) and 567 — Chapter 24. If the director determines that a process complying with the emission rates specified in Table I is causing or will cause air pollution in a specific area of the state, an emission standard of 0.1 grain per standard cubic foot of exhaust gas may be imposed.

Authority for Requirement: 567 IAC 23.3(2)"a" (prior to 7/21/1999)

Fugitive Dust: Attainment and Unclassified Areas - No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered repaired or demolished, with the exception of farming operations or dust generated by ordinary travel on unpaved public roads, without taking reasonable precautions to prevent particulate matter in quantities sufficient to create a nuisance, as defined in Iowa Code section 657.1, from becoming airborne. All persons, with the above exceptions, shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate. The highway authority shall be responsible for taking corrective action in those cases where said authority has received complaints of or has actual knowledge of dust conditions which require abatement pursuant to this subrule. Reasonable precautions may include, but not limited to, the following procedures.

1. Use, where practical, of water or chemicals for control of dusts in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land.
2. Application of suitable materials, such as but not limited to asphalt, oil, water or chemicals on unpaved roads, material stockpiles, race tracks and other surfaces which can give rise to airborne dusts.
3. Installation and use of containment or control equipment, to enclose or otherwise limit the emissions resulting from the handling and transfer of dusty materials, such as but not limited to grain, fertilizers or limestone.
4. Covering at all times when in motion, open-bodied vehicles transporting materials likely to give rise to airborne dusts.
5. Prompt removal of earth or other material from paved streets or to which earth or other material has been transported by trucking or earth-moving equipment, erosion by water or other means.

Authority for Requirement: 567 IAC 23.3(2)"c"

² Paragraph 567 IAC 23.3(2)"a" (prior to 7/21/1999) is the general particulate matter emission standard currently in the Iowa SIP.

Compliance Plan

The owner/operator shall comply with the applicable requirements listed below. The compliance status is based on information provided by the applicant.

Unless otherwise noted in Section III of this permit, Pella Corporation – Carroll Operations is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which become effective during the permit term, Pella Corporation – Carroll Operations shall comply with such requirements in a timely manner.

Authority for Requirement: 567 IAC 22.108(15)

Subject to 40 CFR Part 63 Subpart B-Requirements for Control Technology Determination for Major Sources in Accordance with Clean Air Act, Section 112(g)

- (a) Record daily, the total quantity of all VOC containing materials (coating, primer, adhesive, solvent, etc.) used in Paint Kitchen (EU-16), Spray Booth #1 (EU-17), Spray Booth #2 (EU-18), Primer/Topcoat Oven (EU-19a, b, c), Dry Filter Work Booth (EU-20), Paint Kitchen (EU-21), Spray Paint Booth #3 (EU-22), Spray Booth #4 (EU-23), Topcoat Oven (EU-24a, b, c), Dry Filter Work Booth (EU-25), UV-Coater (EU-27a, c), and UV-Coater (EU-28a, b) in gallons.
- (b) Record the VOC content of all VOC containing materials (coating, primer, adhesive, solvent, etc.) used in Paint Kitchen (EU-16), Spray Booth #1 (EU-17), Spray Booth #2 (EU-18), Primer/Topcoat Oven (EU-19a, b, c), Dry Filter Work Booth (EU-20), Paint Kitchen (EU-21), Spray Paint Booth #3 (EU-22), Spray Booth #4 (EU-23), Topcoat Oven (EU-24a, b, c), Dry Filter Work Booth (EU-25), UV-Coater (EU-27a, c), and UV-Coater (EU-28a, b) in pounds per gallon.
- (c) Calculate and record on a monthly basis, total VOC emissions in tons from Paint Kitchen (EU-16), Spray Booth #1 (EU-17), Spray Booth #2 (EU-18), Primer/Topcoat Oven (EU-19a, b, c), Dry Filter Work Booth (EU-20), Paint Kitchen (EU-21), Spray Paint Booth #3 (EU-22), Spray Booth #4 (EU-23), Topcoat Oven (EU-24a, b, c), Dry Filter Work Booth (EU-25), UV-Coater (EU-27a, c), and UV-Coater (EU-28a, b). Calculate and record rolling 12-month totals.

All records necessary to demonstrate compliance with 40 CFR Part 63 Subpart B-Requirements for Control Technology Determination for Major Sources in Accordance with Clean Air Act, Section 112(g), 40 CFR §63.40, Pella Corporation must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record as specified in §63.4731.

- (d) As specified in 40 CFR Part 63 §63.4691, Pella Corporation must include all coating, thinners, and cleaning materials used in affected source (EU-16 through EU-25 and EU-27) when determining whether organic HAP emission rate is equal to or less than applicable emission

limit of 0.48 lb HAP/gallon Solids based on 40 CFR Part 63 Subpart B-*Requirements for Control Technology Determination for Major Sources in Accordance with Clean Air Act, Section 112(g)*, 40 CFR §63.40.

- (1) To make this determination, Pella Corporation must use at least one of the three compliance options listed in paragraphs (a) through (c) of §63.4691, i.e. *Compliant Material Option*, *Emission rate without add-on controls option*, and *Emission rate with add-on controls*. If Pella Corporation would like to implement *Emission Rate with add-on controls option* as specified in §63.4691(c), Pella Corporation must submit a request to the Department to modify this permit.
- (2) Pella Corporation may apply any of the compliance options to an individual coating or to multiple coating operations as a group or the entire affected source (EU-16 through EU-25 and EU-27) in accordance with the requirements specified in §63.4691.
- (3) Pella Corporation may use different compliance options for different coating operations or at different times on the same coating operation in accordance with the requirements specified in §63.4691.
- (4) Pella Corporation may not use different compliance options at the same time on the same coating operation in accordance with the requirements specified in §63.4691.

Compliant Material Option: If Pella Corporation chooses the Compliant Material Option, Pella Corporation must comply with the requirements specified in Conditions 15 (e) through (g) of this permit and requirements specified in 40 CFR Part 63 §63.4741.

- (e) As specified in 40 CFR Part 63 §63.4741, in demonstrating initial compliance of affected sources (EU-16 through EU-25 and EU-27) with applicable emission limit of 0.48 lb HAP/gallon Solids, Pella Corporation must comply with the following conditions:
 - (1) Determine the mass fraction of organic HAP for each coating, thinner, and cleaning agent used during the compliance period according to the requirements specified in §63.4741(a).
 - (2) Determine the volume fraction of coating solids for each coating used during the compliance period according to the requirements specified in §63.4741(b).
 - (3) Determine the density of each coating used during the compliance period from test results using ASTM Method D1475-90 or information from the supplier or manufacturer of the material according to the requirements specified in §63.4741(c).
 - (4) Calculate the organic HAP content, lbs organic HAP per gallon coating solids, of each coating used during the compliance period according to requirements in §63.4741(d).
- (f) As specified in 40 CFR Part 63 §63.4742(a), For each compliance period to demonstrate continuous compliance, Pella Corporation must use no coating in affected sources (EU-16 through EU-25 and EU-27) for which the organic HAP content determined using Equation 2 of §63.4741 exceeds 0.48 lb HAP/gallon Solids and use no thinner or cleaning material that contains organic HAP, determined according to §63.4741(a). A compliance period consists of

12 months. The initial compliance period for affected sources (EU-16 through EU-25 and EU-27) is the end of the first month in which this permit is issued. Each month after the end of the initial compliance period is the end of a compliance period consisting of that month and the preceding 11 months.

- (g) As specified in 40 CFR Part 63 §63.4742(b), the use of any coating thinner, or cleaning material that does not meet criteria specified in Condition 15(f) of this permit is a deviation from the emission limitations that must be reported as specified in 40 CFR Part 63 §63.4710(c)(6) and §63.4720(a)(6).

Emission Rate Without Add-on Controls Option: If Pella Corporation chooses the Emission Rate Without Add-on Controls Option, Pella Corporation must comply with the requirements specified in Conditions 15 (h) through (j) of this permit and requirements specified in 40 CFR Part 63 §63.4751.

- (h) As specified in 40 CFR Part 63 §63.4751, in demonstrating initial compliance of affected sources (EU-16 through EU-25 and EU-27) with applicable emission limit of 0.48 lb HAP/gallon Solids, Pella Corporation must comply with the following conditions:

- (1) Determine the mass fraction of organic HAP for each coating, thinner, and cleaning agent used during each month according to the requirements specified in §63.4751(a).
- (2) Determine the volume fraction of coating solids for each coating used during each month according to the requirements specified in §63.4751(b).
- (3) Determine the density of each coating, thinner, and cleaning material used during each month from test results using ASTM Method D1475-90, information from the supplier or manufacturer of the material, or reference sources providing density or specific gravity data of pure materials according to the requirements specified in §63.4751(c).
- (4) Determine the volume (gallons) of each coating, thinner, and cleaning material used during each month by measurement or usage records according to the requirements specified in §63.4751(d).
- (5) The mass of organic HAP emissions is the combined mass of organic HAP contained in all coating, thinners, and cleaning materials used during each month minus the organic HAP in certain waste materials. Calculate the mass of organic HAP emissions according to the requirements specified in §63.4751(e).

(A) If owner/operator chooses to account for the mass of organic HAP contained in the waste materials sent or designated for shipment to a hazardous waste TSDF in Equation 1 of §63.4751(e), then the owner/operator must determine it according to paragraphs (e)(4)(i) through (iv) of §63.4751(e)(4).

- (6) Determine the total volume of coating solids used which is the combined volume of coating solids for all coating used during each month according to the requirements specified in §63.4751(f).

- (7) Calculate the organic HAP emission rate for the 12-month compliance period, lbs organic HAP per gallon coating solids used according to the requirements specified in §63.4751(g).

- (i) As specified in 40 CFR Part 63 §63.4752(a), to demonstrate continuous compliance, the organic HAP emission rate for each compliance period, calculated using Equation 3 of §63.4751, must be less as or equal to of 0.48 lb HAP/gallon Solids from affected sources (EU-16 through EU-25 and EU-27). A compliance period consists of 12 months. The initial compliance period for affected sources (EU-16 through EU-25 and EU-27) is the end of the first month in which this permit is issued. Each month after the end of the initial compliance period is the end of a compliance period consisting of that month and the preceding 11 months. You must perform the calculations in §63.4751(a) through (g) on monthly basis using the data from the previous 12 months of operation.
- (j) As specified in 40 CFR Part 63 §63.4752(b), if the organic HAP emission rate for any 12-month compliance period exceeded the emission limit of 0.48 lb HAP/gallon solids, this is a deviation from the emission limitations for that compliance period and must be reported as specified in 40 CFR Part 63 §63.4710(c)(6) and §63.4720(a)(6).
- (k) The owner/operator must keep all records as required by 40 CFR Part 63 §63.4730 and §63.4731.
- (l) Differences in language between this permit and Subpart QQQQ-*National Emission Standards for Hazardous Air Pollutants Surface Coating of Wood Building Product* due to grammatical or typographical errors, the language specified in Subpart QQQQ shall be considered correct.
- (m) Retain Material Safety Data Sheets (MSDS) for VOC containing materials (coating, primer, adhesive, solvent, etc.) used in Paint kitchen (EU-16), Spray Booth #1 (EU-17), Spray Booth #2 (EU-18), Primer/Topcoat Oven (EU-19a, b, c), Dry Filter Work Booth (EU-20), Paint Kitchen (EU-21), Spray Paint Booth #3 (EU-22), Spray Booth #4 (EU-23), Topcoat Oven (EU-24a, b, c), Dry Filter Work Booth (EU-25), UV-Coater (EU-27a, c), and UV-Coater (EU-28).

Notice of MACT Approval Information (40 CFR 63.43(g))

Equipment Location:

Highway 30 East
Carroll, Iowa 51401

Latitude - Longitude:

Lat: 42° 3min 49 sec
Long: -178° 51 min 27 sec

Description of project:

This project consists of resolution to a exceedence of applicable individual HAP limits to avoid 40 CFR Part 63 Subpart B-*Requirements for Control Technology Determination for Major Sources in Accordance with Clean Air Act, Section 112(g)*, 40 CFR §63.40 associated with pre-finished system (EU-16 through EU-25 and EU-27).

Affected sources and source category:

Affected Sources	Source Category
Paint Kitchen (EU16)	Surface Coating of Wood Building Products
Spray Machine #1-Primer/Topcoat (EU17)	Surface Coating of Wood Building Products
Spray Machine #2- Primer/Topcoat (EU18)	Surface Coating of Wood Building Products
Primer/Topcoat Oven-Flash Zone (EU19)	Surface Coating of Wood Building Products
Primer/Topcoat Oven-Drying Zone (EU19)	Surface Coating of Wood Building Products
Primer/Topcoat Oven-Cooling Zone (EU19)	Surface Coating of Wood Building Products
Dry Filter Work Booth (EU20)	Surface Coating of Wood Building Products
Paint Kitchen (EU21)	Surface Coating of Wood Building Products
Spray Machine #3-Topcoat (EU22)	Surface Coating of Wood Building Products
Spray Machine #4-Topcoat (EU23)	Surface Coating of Wood Building Products
Topcoat Oven-Flash Zone (EU24)	Surface Coating of Wood Building Products
Topcoat Oven-Drying Zone (EU24)	Surface Coating of Wood Building Products
Topcoat Oven-Cooling Zone (EU24)	Surface Coating of Wood Building Products
Dry Filter Work Booth (EU25)	Surface Coating of Wood Building Products
Vacuum Coater (EU27a)	Surface Coating of Wood Building Products
Ultraviolet Curing Chamber (EU27c)	Surface Coating of Wood Building Products

Sources not affected - rationale for exclusion

Paint Machine/Electric Dryer (EU1)-existing unaffected unit	Wood Dust System (EU2)- existing unaffected unit
Wood Dust System (EU4)- existing unaffected unit	Wood Dust System (EU5)- existing unaffected unit
Paint Booth (EU6)- existing unaffected unit	Drying Room (EU7)- existing unaffected unit
Wood Dust System (EU11)- existing unaffected unit	Emergency Generator (EU12)- existing unaffected unit
Boiler #1 (EU13)- existing unaffected unit	Boiler #2 (EU14)- existing unaffected unit
Catalytic Oxidizer (EU15)- existing unaffected unit	Wood Dip Dry (EU15)- existing unaffected unit
Sander System (EU26)- existing unaffected unit	UV-Coater (EU28)-new unaffected unit

Date of construction:

September 1, 2000

Date of start-up of constructed equipment:

November 21, 2000

Hazardous Air Pollutants potentially emitted from this source:

Toluene 2,4 Diisocyanate	Toluene
Methyl Isobutyl Ketone	Ethylbenzene
Xylene	Hexamethylene-1,6-diisocyanate

Authority for Requirement: Iowa DNR Construction Permits 00-A-860-S3, 00-A-861-S3, 00-A-862-S3, 00-A-863-S3, 00-A-864-S3, 00-A-865-S3, 00-A-866-S3, 00-A-867-S3, 00-A-868-S3, 00-A-869-S3, 00-A-870-S3, 00-A-871-S3, 00-A-872-S3, 00-A-873-S3, 02-A-367-S2, 02-A-369-S1

567 IAC 23.1(4)"b"(1)
40 CFR Part 63 Subpart B

III. Emission Point-Specific Conditions

Facility Name: Pella Corporation - Carroll Division
Permit Number: 98-TV-025R1-M002

Emission Point ID Number: 1A

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): 1A
Emissions Control Equipment ID Number: CE 1A
Emissions Control Equipment Description: Baffle/Dry Filter

Emission Unit vented through this Emission Point: 1A
Emission Unit Description: Wood Paint Machine Exhaust
Raw Material/Fuel: Paint
Rated Capacity: 9.6 gal./hr each (4 spray guns)

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

⁽¹⁾ Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedance of the indicator opacity of (10%) will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. The permit holder shall also file an "indicator opacity exceedance report" with the DNR field office and keep records as required in the policy. If the exceedance continues after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Authority for Requirement: Iowa DNR Construction Permit 91-A-331-S4
567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limit(s): 0.01 gr./dscf

Authority for Requirement: Iowa DNR Construction Permit 91-A-331-S4
567 IAC 23.4(13)

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:

1. The paint usage for permits 91-A-331-S4 and 01-A-862 will not exceed 4,980 gallons per 12 month period rolled monthly.
2. The VOC content of the spray material will not exceed 1.0 lb./gal.
3. The solids content of the spray material will not exceed 9.0 lb./gal.
4. The spray booth is limited to the use of no more than four spray nozzles at one time.
5. Each spray nozzle will have a capacity of no more than 9.6 gal./hr.

Control equipment parameters:

The paint arrestor pads (control equipment) shall be maintained and replaced according to manufacturer's instructions.

Reporting & Record keeping:

All records, as required below, shall be satisfactory for demonstrating compliance with all applicable operating limits. Records must be maintained on site for five years and made available to the DNR upon request. The owner or operator of the equipment shall maintain the following records:

1. The total quantity of paint used for permits 91-A-331-S4 and 01-A-862 in gallons per twelve-month rolling total.
2. The VOC content of the spray materials used.
3. The solids content of the spray materials used.
4. The specifications of the spray nozzles used.
5. A record of all maintenance and replacement of the paint arrestor pads (filters).

Authority for Requirement: Iowa DNR Construction Permit 91-A-331-S4

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 29

Stack Opening, (inches, dia.): 12

Exhaust Flow Rate (scfm): 1250

Exhaust Temperature (°F): Ambient

Discharge Style: Vertical

Authority for Requirement: Iowa DNR Construction Permit 91-A-331-S4

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Paint Booth Agency Operation & Maintenance Plan**Weekly**

- Inspect the paint booth system for conditions that reduce the operating efficiency of the collection system. This will include a visual inspection of the condition of the filter material.
- Maintain a written record of the observation and any action resulting from the inspection.

Record Keeping and Reporting

- Maintenance and inspection records will be kept for five years and available upon request.

Quality Control

- The filter equipment will be operated and maintained according to the manufacturer's recommendations.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 1B

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): 1B

Emissions Control Equipment ID Number: CE 1A

Emissions Control Equipment Description: Baffle/Dry Filter

Emission Unit vented through this Emission Point: 1B

Emission Unit Description: Wood Paint Line Dryer Exhaust

Raw Material/Fuel: Paint

Rated Capacity: 9.6 gal./hr each (4 spray guns) (from Paint Booth 1A)

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

- ⁽¹⁾ Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedance of the indicator opacity of (10%) will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. The permit holder shall also file an "indicator opacity exceedance report" with the DNR field office and keep records as required in the policy. If the exceedance continues after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Authority for Requirement: Iowa DNR Construction Permit 01-A-862
567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limit(s): 0.01 gr./dscf

Authority for Requirement: Iowa DNR Construction Permit 01-A-862
567 IAC 23.4(13)

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:

1. Total paint usage for permits 91-A-331-S4 and 01-A-862 shall not exceed 4980 gallons per twelve-month rolling total.
2. The VOC content of the spray material shall not exceed 1.0 lb/gallon.
3. The solids content of the spray material shall not exceed 9.0 lb/gallon.
4. The paint machine shall not operate more than four spray nozzles at one time.
5. The capacity for each spray nozzle shall not exceed 9.6 gallons per hour.

Control equipment parameters:

The paint arrestor pads (control equipment) shall be maintained and replaced according to manufacturer's instructions.

Reporting & Record keeping:

All records, as required below, shall be satisfactory for demonstrating compliance with all applicable operating limits. Records must be maintained on site for five years and made available to the DNR upon request. The owner or operator of the equipment shall maintain the following records:

1. The total quantity of paint used for permits 91-A-331-S4 and 01-A-862 in gallons per twelve-month rolling total.
2. The VOC content of the spray materials used.
3. The solids content of the spray materials used.
4. The specifications of the spray nozzles used.
5. A record of all maintenance and replacement of the paint arrestor pads (filters).

Authority for Requirement: Iowa DNR Construction Permit 01-A-862

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 29

Stack Opening, (inches, dia.): 6

Exhaust Flow Rate (scfm): 2000

Exhaust Temperature (°F): Ambient

Discharge Style: Vertical

Authority for Requirement: Iowa DNR Construction Permit 01-A-862

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 2

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): 2

Emissions Control Equipment ID Number: CE 2A & CE 2B

Emissions Control Equipment Description: Cyclone & Baghouse

Emission Unit vented through this Emission Point: 2

Emission Unit Description: Wood Dust System #1

Raw Material/Fuel: Wood

Rated Capacity: 2400 Mfg/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limit(s): 4.236 lb./hr

Authority for Requirement: Iowa DNR Construction Permit 82-A-054
567 IAC 23.3(2)"a"

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Stack Testing:

Pollutant - Particulate Matter⁽¹⁾

1st Stack Test to be Completed by 10/04/07

Test Method - Iowa Compliance Sampling Manual Method 5

Authority for Requirement - 567 IAC 22.108(3)

⁽¹⁾ The stack test for EP 5 will satisfy the compliance testing requirements for EP 2 and EP 4. If EP 5 fails to achieve compliance, stack testing will be required for EP 2 and EP 4.

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 4

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): 4

Emissions Control Equipment ID Number: CE 4A & CE 4B

Emissions Control Equipment Description: Cyclone & Baghouse

Emission Unit vented through this Emission Point: 4

Emission Unit Description: Wood Dust System #3

Raw Material/Fuel: Wood

Rated Capacity: 2700 Mfg/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limit(s): 6.3 lb./hr

Authority for Requirement: Iowa DNR Construction Permit 87-A-070
567 IAC 23.3(2)"a"

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Stack Testing:

Pollutant - Particulate Matter⁽¹⁾

1st Stack Test to be Completed by 10/04/07

Test Method - Iowa Compliance Sampling Manual Method 5

Authority for Requirement - 567 IAC 22.108(3)

⁽¹⁾ The stack test for EP 5 will satisfy the compliance testing requirements for EP 2 and EP 4. If EP 5 fails to achieve compliance, stack testing will be required for EP 2 and EP 4.

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Baghouse Agency Operation & Maintenance Plan

Monitoring Guidelines

The facility makes a commitment to take timely corrective action during periods of excursion where the indicators are out of range. A corrective action may include an investigation of the reason for the excursion, evaluation of the situation and necessary follow-up action to return operation within the indicator range. An excursion is determined by the averaged discrete data point over a period of time. An excursion does not necessarily indicate a violation of an applicable requirement. If the corrective action measures fail to return the indicators to the appropriate range, the facility will report the exceedence to the department and conduct source testing within 90 days of the exceedence to demonstrate compliance with applicable requirements. If the test demonstrates compliance with emission limits then new indicator ranges must be set for monitoring and the new ranges must be incorporated in the operating permit. If the test demonstrates noncompliance with emission limits, then the facility, within 60 days, proposes a schedule to implement corrective action to bring the source into compliance and demonstrate compliance.

General

Periodic Monitoring is not required during periods of time greater than one day in which the source does not operate.

Weekly

- Visible emissions shall be observed on a weekly basis to ensure no visible emissions during the material handling operation of the unit. If visible emissions are observed this would be an exceedence not a violation and corrective action will be taken as soon as possible, but no later than 8 hours. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2 hour intervals throughout the day. If unsuccessful that day due to weather, an observation shall be made the following day.
- Check and document the baghouse pressure drop. If the pressure drop falls out of the normal operating range, 0.75 - 3.0, corrective action will be taken within 8 hours to return the pressure drop to normal.

Maintain a written record of the observation and any action resulting from the inspection.

Monthly

- Check the cleaning sequence of the baghouse.
- Check the hopper functions and performance.

If leaks or abnormal conditions are detected the appropriate measures for remediation will be implemented within eight (8) hours. Maintain a written record of the inspection and any action resulting from the inspection.

Quarterly

- Thoroughly inspect bags for leaks and wear. (Look for obvious holes or tears in the bags.)
If leaks or abnormal conditions are detected, the appropriate measures for remediation will be implemented within eight (8) hours. Bag replacement should be documented by identifying the date, time and location of the bag in relationship to the other bags. Maintain a written record of the inspection and any action resulting from the inspection.

Semiannual

- Inspect every 6 months all components that are not subject to wear or plugging, including structural components, housing, ducts and hoods.

If leaks or abnormal conditions are detected the appropriate measures for remediation will be implemented within eight (8) hours. Maintain a written record of the inspection and any action resulting from the inspection.

Record Keeping and Reporting

Maintenance and inspection records will be kept for five years and available upon request.

Quality Control

The filter equipment will be operated and maintained according to the manufacturers recommendations.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 5

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): 5

Emissions Control Equipment ID Number: CE 5A & CE 5B

Emissions Control Equipment Description: Cyclone & Baghouse

Emission Unit vented through this Emission Point: 5

Emission Unit Description: Wood Dust System #2

Raw Material/Fuel: Wood

Rated Capacity: 2700 Mfg/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limit(s): 2.76 lb./hr

Authority for Requirement: Iowa DNR Construction Permit 87-A-093
567 IAC 23.3(2)"a"

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Stack Testing:

Pollutant - Particulate Matter⁽¹⁾

1st Stack Test to be Completed by 10/04/07

Test Method - Iowa Compliance Sampling Manual Method 5

Authority for Requirement - 567 IAC 22.108(3)

⁽¹⁾ The stack test for EP 5 will satisfy the compliance testing requirements for EP 2 and EP 4. If EP 5 fails to achieve compliance, stack testing will be required for EP 2 and EP 4.

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 6

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): 6

Emissions Control Equipment ID Number: CE 6

Emissions Control Equipment Description: Dry Filter

Emission Unit vented through this Emission Point: 6

Emission Unit Description: Paint Booth Stack - Maintenance Use

Raw Material/Fuel: Paint

Rated Capacity: 2.0 gal./hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: PM-10

Emission Limit(s): 1.54 lb./hr

Authority for Requirement: Iowa DNR Construction Permit 91-A-035S1

Pollutant: Particulate Matter

Emission Limit(s): 0.01 gr./dscf

Authority for Requirement: Iowa DNR Construction Permit 91-A-035S1
567 IAC 23.4(13)

Pollutant: Volatile Organic Compounds (VOCs)

Emission Limit(s): 2.0 Tons/yr

Authority for Requirement: Iowa DNR Construction Permit 91-A-035S1

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:

VOC usage for the spray booth shall not exceed 2 tons/yr.

Reporting & Record keeping:

All records as required below shall be satisfactory for demonstrating compliance with all applicable operating limits. Records shall be maintained on site for five (5) years and available for inspection upon request by representatives of the DNR. These records shall show the following:

1. Each day of operation the quantities and the VOC content of each coating and solvent used will be recorded.
2. For the first twelve (12) months of operation, determine the cumulative tons of VOCs used based on the gallons of coating and solvent used and the VOC content of the coating and solvent in lb/gal.
3. After the first twelve (12) months of operation, determine annual tons of VOCs used based on the gallons of coating and solvent used and the VOC content of the coating and solvent in lb/gal.
4. Maintain copies of Material Safety Data Sheets (MSDS) for all coatings and solvents used.

Authority for Requirement: Iowa DNR Construction Permit 91-A-035S1, 567 IAC 22.108(3)

Emission Point Characteristics

This emission point shall conform to the conditions listed below.

Stack Height (feet): 29

Stack Diameter (inches): 33

Stack Exhaust Flow Rate (scfm): 18,000

Stack Temperature (°F): 70

Vertical, Unobstructed Discharge Required: Yes ☒ No ☐

Authority for Requirement: Iowa DNR Construction Permit 91-A-035S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Paint Booth Agency Operation & Maintenance Plan**Weekly**

- Inspect the paint booth system for conditions that reduce the operating efficiency of the collection system. This will include a visual inspection of the condition of the filter material.
- Maintain a written record of the observation and any action resulting from the inspection.

Record Keeping and Reporting

- Maintenance and inspection records will be kept for five years and available upon request.

Quality Control

- The filter equipment will be operated and maintained according to the manufacturer's recommendations.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP 7A

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): 7A

Note: Emission Unit 7A normally vents through EP-CO after passing through a catalytic oxidizer. Emission point 7A is a bypass stack for emission unit 7A used during upset conditions.

Emission Unit vented through this Emission Point: 7A

Emission Unit Description: Wood Treat Drying Room

Raw Material/Fuel: Wood Preservative

Rated Capacity: NA

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

⁽¹⁾ Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedence of the indicator opacity of (10%) will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. The permit holder shall also file an "indicator opacity exceedence report" with the DNR field office and keep records as required in the policy. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Authority for Requirement: Iowa DNR Construction Permit 99-A-908-S1
567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limit(s): 0.01 gr./dscf

Authority for Requirement: Iowa DNR Construction Permit 99-A-908-S1
567 IAC 23.4(13)

Pollutant: Volatile Organic Compounds (VOCs)

Emission Limit(s): 50 Tons/yr⁽²⁾

⁽²⁾ Limit is based on operating limits, 95% destruction efficiency of the control equipment when EU7A and EU7B and EU15 run through EP-CO, and is a bubble limit for the four emission points of EP-7A, EP-7B, EP-15, and EP-CO which is not to be exceeded in any combination of using the four emission points.

Authority for Requirement: Iowa DNR Construction Permit 99-A-908-S1

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:

1. The maximum VOC content of any preservative or mineral spirits added to the dip tank serving this drying room shall not exceed 7.0 pounds per gallon.
2. The by-pass stack shall have a monitoring device installed to determine the number of hours the by-pass stack is open to the atmosphere.

Reporting & Record keeping:

All records as required below, must be satisfactory for demonstrating compliance with all applicable operating limits. Records shall be maintained on site for five years and shall be available for inspection by the Department. Records shall be maintained in a legible and orderly manner and shall indicate the following:

1. The VOC content of any preservative or mineral spirits added to the dip tank serving the drying room (EU7A) in pounds per gallon.
2. The amount of preservative and mineral spirits added to the dip tank serving the drying room (EU7A) in gallons on a daily basis.
3. The number of hours the by-pass stack (EP-7A) is open to the atmosphere on a daily basis.
4. Calculate and record the total VOC amount in tons per month that are emitted by the by-pass stack EP-7A.
5. Calculate and record on a rolling 12-month basis the total emissions from EP-7A, EP-7B, EP-15, and EP-CO to ensure the total emissions do not exceed the 50 TPY limit.
6. Maintain a record of the drying room unit maintenance as recommended by the manufacturer's specifications.

Authority for Requirement: Iowa DNR Construction Permit 99-A-908-S1

Emission Point Characteristics

This emission point shall conform to the conditions listed below.

Stack Height (feet): 40

Stack Diameter (inches): 35

Stack Exhaust Flow Rate (scfm): 1,000

Stack Temperature (°F): Ambient

Vertical, Unobstructed Discharge Required: Yes ☒ No ☐

Authority for Requirement: Iowa DNR Construction Permit 99-A-908-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the

emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP 7B

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): 7B

Note: Emission Unit 7B normally vents through EP-CO after passing through a catalytic oxidizer. Emission point 7B is a bypass stack for emission unit 7B used during upset conditions.

Emission Unit vented through this Emission Point: 7B

Emission Unit Description: Wood Treating - Vacuum Tank & Drying Room

Raw Material/Fuel: Wood Preservative

Rated Capacity: NA

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

⁽¹⁾ Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedence of the indicator opacity of (10%) will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. The permit holder shall also file an "indicator opacity exceedence report" with the DNR field office and keep records as required in the policy. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Authority for Requirement: Iowa DNR Construction Permit 96-A-1041-S2
567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limit(s): 0.01 gr./dscf

Authority for Requirement: Iowa DNR Construction Permit 96-A-1041-S2
567 IAC 23.4(13)

Pollutant: Volatile Organic Compounds (VOCs)

Emission Limit(s): 50 Tons/yr ⁽²⁾

⁽²⁾ Limit is based on operating limits, 95% destruction efficiency of the control equipment when EU7A and EU7B and EU15 run through EP-CO, and is a bubble limit for the four emission points of EP-7A, EP-7B, EP-15, and EP-CO which is not to be exceeded in any combination of using the four emission points.

Authority for Requirement: Iowa DNR Construction Permit 96-A-1041-S2

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:

1. The maximum VOC content of any preservative or mineral spirits added to the dip tank serving this drying room shall not exceed 7.0 pounds per gallon.
2. The by-pass stack shall have a monitoring device installed to determine the number of hours the by-pass stack is open to the atmosphere.

Reporting & Record keeping:

All records as required below, must be satisfactory for demonstrating compliance with all applicable operating limits. Records shall be maintained on site for five years and shall be available for inspection by the Department. Records shall be maintained in a legible and orderly manner and shall indicate the following:

1. The VOC content of any preservative or mineral spirits added to the dip tank serving the drying room (EU7B) in pounds per gallon.
2. The amount of preservative and mineral spirits added to the dip tank serving the drying room (EU7B) in gallons on a daily basis.
3. The number of hours the by-pass stack (EP-7A) is open to the atmosphere on a daily basis.
4. Calculate and record the total VOC amount in tons per month that are emitted by the by-pass stack EP-7A.
5. Calculate and record on a rolling 12-month basis the total emissions from EP-7A, EP-7B, EP-15, and EP-CO to ensure the total emissions do not exceed the 50 TPY limit.
6. Maintain a record of the drying room unit maintenance as recommended by the manufacturer's specifications.

Authority for Requirement: Iowa DNR Construction Permit 96-A-1041-S2

Emission Point Characteristics

This emission point shall conform to the conditions listed below.

Stack Height (feet): 29

Stack Diameter (inches): 22

Stack Exhaust Flow Rate (acfm): 1,000

Stack Temperature (°F): Ambient

Vertical, Unobstructed Discharge Required: Yes ☒ No ☐

Authority for Requirement: Iowa DNR Construction Permit 96-A-1041-S2

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the

emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 11

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): 11

Emissions Control Equipment ID Number: CE 11

Emissions Control Equipment Description: Baghouse

Emission Unit vented through this Emission Point: 11

Emission Unit Description: Wood Dust System #4

Raw Material/Fuel: Wood

Rated Capacity: 3240 Mfg/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: PM-10

Emission Limit(s): 1.07 lb./hr, 0.0023 gr./dscf

Authority for Requirement: Iowa DNR Construction Permit 91-A-136-S

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr./dscf

Authority for Requirement: 567 IAC 23.3(2)"a"

Emission Point Characteristics

This emission point shall conform to the conditions listed below.

Stack Height (feet): The point of discharge to the atmosphere shall be in a horizontal orientation and a minimum of 27 feet above surrounding grade elevation.

Authority for Requirement: Iowa DNR Construction Permit 91-A-136-S

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Stack Testing:

Pollutant – Particulate Matter

1st Stack Test to be Completed by 10/04/07

Test Method – Iowa Compliance Sampling Manual Method 5

Authority for Requirement - 567 IAC 22.108(3)

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Baghouse Agency Operation & Maintenance Plan

Monitoring Guidelines

The facility makes a commitment to take timely corrective action during periods of excursion where the indicators are out of range. A corrective action may include an investigation of the reason for the excursion, evaluation of the situation and necessary follow-up action to return operation within the indicator range. An excursion is determined by the averaged discrete data point over a period of time. An excursion does not necessarily indicate a violation of an applicable requirement. If the corrective action measures fail to return the indicators to the appropriate range, the facility will report the exceedence to the department and conduct source testing within 90 days of the exceedence to demonstrate compliance with applicable requirements. If the test demonstrates compliance with emission limits then new indicator ranges must be set for monitoring and the new ranges must be incorporated in the operating permit. If the test demonstrates noncompliance with emission limits, then the facility, within 60 days, proposes a schedule to implement corrective action to bring the source into compliance and demonstrate compliance.

General

Periodic Monitoring is not required during periods of time greater than one day in which the source does not operate.

Weekly

- Visible emissions shall be observed on a weekly basis to ensure no visible emissions during the material handling operation of the unit. If visible emissions are observed this would be an exceedence not a violation and corrective action will be taken as soon as possible, but no later than 8 hours. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2 hour intervals throughout the day. If unsuccessful that day due to weather, an observation shall be made the following day.
- Check and document the baghouse pressure drop. If the pressure drop falls out of the normal operating range, 0.75 - 3.0, corrective action will be taken within 8 hours to return the pressure drop to normal.

Maintain a written record of the observation and any action resulting from the inspection.

Monthly

- Check the cleaning sequence of the baghouse.
- Check the hopper functions and performance.

If leaks or abnormal conditions are detected the appropriate measures for remediation will be implemented within eight (8) hours. Maintain a written record of the inspection and any action resulting from the inspection.

Quarterly

- Thoroughly inspect bags for leaks and wear. (Look for obvious holes or tears in the bags.) If leaks or abnormal conditions are detected, the appropriate measures for remediation will be implemented within eight (8) hours. Bag replacement should be documented by identifying the date, time and location of the bag in relationship to the other bags. Maintain a written record of the inspection and any action resulting from the inspection.

Semiannual

- Inspect every 6 months all components that are not subject to wear or plugging, including structural components, housing, ducts and hoods.

If leaks or abnormal conditions are detected the appropriate measures for remediation will be implemented within eight (8) hours. Maintain a written record of the inspection and any action resulting from the inspection.

Record Keeping and Reporting

Maintenance and inspection records will be kept for five years and available upon request.

Quality Control

The filter equipment will be operated and maintained according to the manufacturers recommendations.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 12

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): 12

Emission Unit vented through this Emission Point: 12
Emission Unit Description: Emergency Diesel Generator
Raw Material/Fuel: Diesel Fuel
Rated Capacity: 112.6 gal./hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 5%
Authority for Requirement: Iowa DNR Construction Permit 94-A-094
567 IAC 23.3(2)"d"

Pollutant: PM-10
Emission Limit(s): 0.81 lb./hr, 0.081 Tons/yr
Authority for Requirement: Iowa DNR Construction Permit 94-A-094

Pollutant: Particulate Matter
Emission Limit(s): 0.8 lb./MMBtu
Authority for Requirement: 567 IAC 23.3(2)"b"(1)

Pollutant: Sulfur Dioxide (SO₂)
Emission Limit(s): 3.30 lb./hr, 0.330 Tons/yr
Authority for Requirement: Iowa DNR Construction Permit 94-A-094

Pollutant: Nitrogen Oxide (NO_x)
Emission Limit(s): 50.6 lb./hr, 5.06 Tons/yr
Authority for Requirement: Iowa DNR Construction Permit 94-A-094

Pollutant: Volatile Organic Compounds (VOCs)
Emission Limit(s): 1.47 lb./hr, 0.147 Tons/yr
Authority for Requirement: Iowa DNR Construction Permit 94-A-094

Pollutant: Carbon Monoxide (CO)
Emission Limit(s): 13.2 lb./hr, 1.32 Tons/yr
Authority for Requirement: Iowa DNR Construction Permit 94-A-094

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Hours of operation:

Operation of this engine shall be limited to 200 hours per year.

Reporting & Record keeping:

The owner or operator shall maintain a written tabulation of hours of operation of this engine. This data listing shall be updated monthly and made available upon request to DNR personnel.

Authority for Requirement: Iowa DNR Construction Permit 94-A-094

Emission Point Characteristics

This emission point shall conform to the conditions listed below.

Stack Height (feet): 16

Stack Diameter (inches): 16

Stack Exhaust Flow Rate (acfm): 14,310

Stack Temperature (°F): 960

Vertical, Unobstructed Discharge Required: Yes ☐ No ☒

Authority for Requirement: Iowa DNR Construction Permit 94-A-094

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 13

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): 13

Emission Unit vented through this Emission Point: 13

Emission Unit Description: Boiler #1 Stack

Raw Material/Fuel: No. 2 Fuel Oil and Natural Gas

Rated Capacity: 4.185 MMBtu/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limit(s): 0.8 lb./MMBtu

Authority for Requirement: 567 IAC 23.3(2)"b"(1)

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 500 ppmv (When combusting natural gas.)

Authority for Requirement: 567 IAC 23.3(3)"e"

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:

1. The boiler is limited to using #2 fuel oil and natural gas.
2. The sulfur content of the #2 fuel oil shall not exceed 0.5% (weight basis percentage).

Reporting & Record keeping:

Records shall be kept on-site for at least five (5) years and shall be available for inspection by the Department. Records shall be maintained in a legible and orderly manner and shall indicate the following:

1. The sulfur content of the #2 fuel oil.

Authority for Requirement: 567 IAC 22.108(3)

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 14

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): 14

Emission Unit vented through this Emission Point: 14

Emission Unit Description: Boiler #2 Stack

Raw Material/Fuel: No. 2 Fuel Oil and Natural Gas

Rated Capacity: 14.65 MMBtu/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limit(s): 0.8 lb./MMBtu

Authority for Requirement: 567 IAC 23.3(2)"b"(1)

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 500 ppmv (When combusting natural gas.)

Authority for Requirement: 567 IAC 23.3(3)"e"

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:

1. The boiler is limited to using #2 fuel oil and natural gas.
2. The sulfur content of the #2 fuel oil shall not exceed 0.5% (weight basis percentage).

Reporting & Record keeping:

Records shall be kept on-site for at least five (5) years and shall be available for inspection by the Department. Records shall be maintained in a legible and orderly manner and shall indicate the following:

1. The sulfur content of the #2 fuel oil, the type of fuel used, and the hours of operation.

Authority for Requirement: 567 IAC 23.3(3) "b"(1)

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP 15

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): 15

Emission Unit vented through this Emission Point: 15

Emission Unit Description: Wood Dip/Dry Unit

Raw Material/Fuel: Wood Preservative

Rated Capacity: 80 gal./hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

⁽¹⁾ Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedence of the indicator opacity of (10%) will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. The permit holder shall also file an "indicator opacity exceedence report" with the DNR field office and keep records as required in the policy. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Authority for Requirement: Iowa DNR Construction Permit 99-A-900-S1
567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limit(s): 0.01 gr./scf

Authority for Requirement: Iowa DNR Construction Permit 99-A-900-S1
567 IAC 23.4(13)

Pollutant: Volatile Organic Compounds (VOCs)

Emission Limit(s): 50 Tons/yr ⁽²⁾

⁽²⁾ Limit is based on operating limits, 95% destruction efficiency of the control equipment when EU7A and EU7B and EU15 run through EP-CO, and is a bubble limit for the four emission points of EP-7A, EP-7B, EP-15, and EP-CO which is not to be exceeded in any combination of using the four emission points.

Authority for Requirement: Iowa DNR Construction Permit 99-A-900-S1

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:

1. The maximum VOC content of any preservative or mineral spirits added to the dip tank serving this drying room shall not exceed 7.0 pounds per gallon.
2. The by-pass stack shall have a monitoring device installed to determine the number of hours the by-pass stack is open to the atmosphere.

Reporting & Record keeping:

All records as required below, must be satisfactory for demonstrating compliance with all applicable operating limits. Records shall be maintained on site for five years and shall be available for inspection by the Department. Records shall be maintained in a legible and orderly manner and shall indicate the following:

1. The VOC content of any preservative or mineral spirits added to the dip tank serving the drying room (EU15) in pounds per gallon.
2. The amount of preservative and mineral spirits added to the dip tank serving the drying room (EU15) in gallons on a daily basis.
3. The number of hours the by-pass stack (EP-15) is open to the atmosphere on a daily basis.
4. Calculate and record the total VOC amount in tons per month that are emitted by the by-pass stack EP-15.
5. Calculate and record on a rolling 12-month basis the total emissions from EP-7A, EP-7B, EP-15, and EP-CO to ensure the total emissions do not exceed the 50 TPY limit.
6. Maintain a record of the drying room unit maintenance as recommended by the manufacturer's specifications.

Authority for Requirement: Iowa DNR Construction Permit 99-A-900-S1

Emission Point Characteristics

This emission point shall conform to the conditions listed below.

Stack Height (feet): 29

Stack Diameter (inches): 10

Stack Exhaust Flow Rate (scfm): 1,000

Stack Temperature (°F): Ambient

Vertical, Unobstructed Discharge Required: Yes ☒ No ☐

Authority for Requirement: Iowa DNR Construction Permit 99-A-900-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the

emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP 16

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): 16

Emission Unit vented through this Emission Point: 16

Emission Unit Description: Primer Paint Kitchen

Raw Material/Fuel: Paint

Rated Capacity: 387 units/scfm

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 80 tons/yr ⁽¹⁾

- ⁽¹⁾ Limit requested by Pella Corp. to restrict potential VOC emissions from Paint kitchen (EU-16), Spray Booth #1 (EU-17), Spray Booth #2 (EU-18), Primer/Topcoat Oven (EU-19a, b, c), Dry Filter Work Booth (EU-20), Paint Kitchen (EU-21), Spray Paint Booth #3 (EU-22), Spray Booth #4 (EU-23), Topcoat Oven (EU-24a, b, c), Dry Filter Work Booth (EU-25), UV-Coater (EU-27a, c), and UV-Coater (EU-28a, b).

Authority for Requirement: Iowa DNR Construction Permit 00-A-860-S3

Pollutant: Total Organic Hazardous Air Pollutants (HAP)

Emission Limit(s): 0.48 lb HAP/gallon Solids ⁽²⁾

- ⁽²⁾ Emission limit imposed on Paint kitchen (EU-16), Spray Booth #1 (EU-17), Spray Booth #2 (EU-18), Primer/Topcoat Oven (EU-19a, b, c), Dry Filter Work Booth (EU-20), Paint Kitchen (EU-21), Spray Paint Booth #3 (EU-22), Spray Booth #4 (EU-23), Topcoat Oven (EU-24a, b, c), Dry Filter Work Booth (EU-25), and UV-Coater (EU-27a, c).

Authority for Requirement: Iowa DNR Construction Permit 00-A-860-S3

567 IAC 23.1(4)"b"(1)

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Subject to 40 CFR Part 63 Subpart B-Requirements for Control Technology Determination for Major Sources in Accordance with Clean Air Act, Section 112(g):

See Plant-Wide Conditions.

Authority for Requirement: Iowa DNR Construction Permit 00-A-860-S3
567 IAC 23.1(4)"b"(1)
40 CFR Part 63 Subpart B

Emission Point Characteristics

This emission point shall conform to the conditions listed below.

Stack Height (feet): 28

Stack Diameter (inches): 12

Stack Exhaust Flow Rate (scfm): 387

Stack Temperature (°F): Ambient

Vertical, Unobstructed Discharge Required: Yes ☒ No ☐

Authority for Requirement: Iowa DNR Construction Permit 00-A-860-S3

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP 17

Associated Equipment

Associated Emission Unit ID Numbers: 17

Emissions Control Equipment ID Number: CE-17

Emissions Control Equipment Description: Dry Filters

Emission Unit vented through this Emission Point: 17

Emission Unit Description: Primer Spray Booth #1

Raw Material/Fuel: Paint

Rated Capacity: 5.67 gal/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40 % ⁽¹⁾

⁽¹⁾ An exceedance of the indicator opacity of “No Visible Emissions” will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Authority for Requirement: Iowa DNR Construction Permit 00-A-861-S3
567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.01 gr./scf

Authority for Requirement: Iowa DNR Construction Permit 00-A-861-S3
567 IAC 23.4(13)

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 80 tons/yr ⁽²⁾

⁽²⁾ Limit requested by Pella Corp. to restrict potential VOC emissions from Paint kitchen (EU-16), Spray Booth #1 (EU-17), Spray Booth #2 (EU-18), Primer/Topcoat Oven (EU-19a, b, c), Dry Filter Work Booth (EU-20), Paint Kitchen (EU-21), Spray Paint Booth #3 (EU-22), Spray Booth #4 (EU-23), Topcoat Oven (EU-24a, b, c), Dry Filter Work Booth (EU-25), UV-Coater (EU-27a, c), and UV-Coater (EU-28a, b).

Authority for Requirement: Iowa DNR Construction Permit 00-A-861-S3

Pollutant: Total Organic Hazardous Air Pollutants (HAP)

Emission Limit(s): 0.48 lb HAP/gallon Solids ⁽³⁾

⁽³⁾ Emission limit imposed on Paint kitchen (EU-16), Spray Booth #1 (EU-17), Spray Booth #2 (EU-18), Primer/Topcoat Oven (EU-19a, b, c), Dry Filter Work Booth (EU-20), Paint Kitchen (EU-21), Spray Paint Booth #3 (EU-22), Spray Booth #4 (EU-23), Topcoat Oven (EU-24a, b, c), Dry Filter Work Booth (EU-25), and UV-Coater (EU-27a, c).

Authority for Requirement: Iowa DNR Construction Permit 00-A-861-S3
567 IAC 23.1(4)"b"(1)

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Subject to 40 CFR Part 63 Subpart B-Requirements for Control Technology Determination for Major Sources in Accordance with Clean Air Act, Section 112(g):

See Plant-Wide Conditions.

Authority for Requirement: Iowa DNR Construction Permit 00-A-861-S3
567 IAC 23.1(4)"b"(1)
40 CFR Part 63 Subpart B

Emission Point Characteristics

This emission point shall conform to the conditions listed below.

Stack Height (feet): 28

Stack Diameter (inches): 16

Stack Exhaust Flow Rate (scfm): 4400

Stack Temperature (°F): Ambient

Vertical, Unobstructed Discharge Required: Yes ☒ No ☐

Authority for Requirement: Iowa DNR Construction Permit 00-A-861-S3

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Stack Testing:

Pollutant – Particulate Matter

1st Stack Test to be Completed by ~~10/04/07~~⁽¹⁾

Test Method – Iowa Compliance Sampling Manual Method 5

Authority for Requirement – 567 IAC 22.108(3)

⁽¹⁾ The two stack tests done on May 15 and July 16/17, 2007 for EP 17 have satisfied the testing requirements for EP 18, EP 22, & EP 23.

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Paint Booth Agency Operation & Maintenance Plan

Weekly

- Inspect the paint booth system for conditions that reduce the operating efficiency of the collection system. This will include a visual inspection of the condition of the filter material.
- Maintain a written record of the observation and any action resulting from the inspection.

Record Keeping and Reporting

- Maintenance and inspection records will be kept for five years and available upon request.

Quality Control

- The filter equipment will be operated and maintained according to the manufacturer's recommendations.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP 18

Associated Equipment

Associated Emission Unit ID Numbers: 18
Emissions Control Equipment ID Number: CE-18
Emissions Control Equipment Description: Dry Filters

Emission Unit vented through this Emission Point: 18
Emission Unit Description: Primer Spray Paint Booth #2
Raw Material/Fuel: Paint
Rated Capacity: 5.67 gal/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40 % ⁽¹⁾

⁽¹⁾ An exceedance of the indicator opacity of “No Visible Emissions” will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Authority for Requirement: Iowa DNR Construction Permit 00-A-862-S3
567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.01 gr./scf

Authority for Requirement: Iowa DNR Construction Permit 00-A-862-S3
567 IAC 23.4(13)

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 80 tons/yr ⁽²⁾

⁽²⁾ Limit requested by Pella Corp. to restrict potential VOC emissions from Paint kitchen (EU-16), Spray Booth #1 (EU-17), Spray Booth #2 (EU-18), Primer/Topcoat Oven (EU-19a, b, c), Dry Filter Work Booth (EU-20), Paint Kitchen (EU-21), Spray Paint Booth #3 (EU-22), Spray Booth #4 (EU-23), Topcoat Oven (EU-24a, b, c), Dry Filter Work Booth (EU-25), UV-Coater (EU-27a, c), and UV-Coater (EU-28a, b).

Authority for Requirement: Iowa DNR Construction Permit 00-A-862-S3

Pollutant: Total Organic Hazardous Air Pollutants (HAP)

Emission Limit(s): 0.48 lb HAP/gallon Solids ⁽³⁾

⁽³⁾ Emission limit imposed on Paint kitchen (EU-16), Spray Booth #1 (EU-17), Spray Booth #2 (EU-18), Primer/Topcoat Oven (EU-19a, b, c), Dry Filter Work Booth (EU-20), Paint Kitchen (EU-21), Spray Paint Booth #3 (EU-22), Spray Booth #4 (EU-23), Topcoat Oven (EU-24a, b, c), Dry Filter Work Booth (EU-25), and UV-Coater (EU-27a, c).

Authority for Requirement: Iowa DNR Construction Permit 00-A-862-S3

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Subject to 40 CFR Part 63 Subpart B-Requirements for Control Technology Determination for Major Sources in Accordance with Clean Air Act, Section 112(g):

See Plant-Wide Conditions.

Authority for Requirement: Iowa DNR Construction Permit 00-A-862-S3

567 IAC 23.1(4)"b"(1)

40 CFR Part 63 Subpart B

Emission Point Characteristics

This emission point shall conform to the conditions listed below.

Stack Height (feet): 28

Stack Diameter (inches): 16

Stack Exhaust Flow Rate (scfm): 4400

Stack Temperature (°F): Ambient

Vertical, Unobstructed Discharge Required: Yes ☒ No ☐

Authority for Requirement: Iowa DNR Construction Permit 00-A-862-S3

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Stack Testing:

Pollutant – Particulate Matter

1st Stack Test to be Completed by ~~10/04/07~~⁽¹⁾

Test Method – Iowa Compliance Sampling Manual Method 5

Authority for Requirement – 567 IAC 22.108(3)

⁽¹⁾ The two stack tests done on May 15 and July 16/17, 2007 for EP 17 have satisfied the testing requirements for EP 18, EP 22, & EP 23.

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Paint Booth Agency Operation & Maintenance Plan

Weekly

- Inspect the paint booth system for conditions that reduce the operating efficiency of the collection system. This will include a visual inspection of the condition of the filter material.
- Maintain a written record of the observation and any action resulting from the inspection.

Record Keeping and Reporting

- Maintenance and inspection records will be kept for five years and available upon request.

Quality Control

- The filter equipment will be operated and maintained according to the manufacturer's recommendations.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP 19a

Associated Equipment

Associated Emission Unit ID Numbers: 19a

Emission Unit vented through this Emission Point: 19a

Emission Unit Description: Primer Oven Flash Zone

Raw Material/Fuel: NA

Rated Capacity: 3,500 units/acfm

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 80 tons/yr ⁽¹⁾

⁽¹⁾ Limit requested by Pella Corp. to restrict potential VOC emissions from Paint kitchen (EU-16), Spray Booth #1 (EU-17), Spray Booth #2 (EU-18), Primer/Topcoat Oven (EU-19a, b, c), Dry Filter Work Booth (EU-20), Paint Kitchen (EU-21), Spray Paint Booth #3 (EU-22), Spray Booth #4 (EU-23), Topcoat Oven (EU-24a, b, c), Dry Filter Work Booth (EU-25), UV-Coater (EU-27a, c), and UV-Coater (EU-28a, b).

Authority for Requirement: Iowa DNR Construction Permit 00-A-863-S3

Pollutant: Total Organic Hazardous Air Pollutant (HAP)

Emission Limit(s): 0.48 lb HAP/gallon Solids ⁽²⁾

⁽²⁾ Emission limit imposed on Paint kitchen (EU-16), Spray Booth #1 (EU-17), Spray Booth #2 (EU-18), Primer/Topcoat Oven (EU-19a, b, c), Dry Filter Work Booth (EU-20), Paint Kitchen (EU-21), Spray Paint Booth #3 (EU-22), Spray Booth #4 (EU-23), Topcoat Oven (EU-24a, b, c), Dry Filter Work Booth (EU-25), and UV-Coater (EU-27a, c).

Authority for Requirement: Iowa DNR Construction Permit 00-A-863-S3

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Subject to 40 CFR Part 63 Subpart B-Requirements for Control Technology Determination for Major Sources in Accordance with Clean Air Act, Section 112(g):

See Plant-Wide Conditions.

Authority for Requirement: Iowa DNR Construction Permit 00-A-863-S3

567 IAC 23.1(4)"b"(1)

40 CFR Part 63 Subpart B

Emission Point Characteristics

This emission point shall conform to the conditions listed below.

Stack Height (feet): 28

Stack Diameter (inches): 16

Stack Exhaust Flow Rate (scfm): 3500

Stack Temperature (°F): 100

Vertical, Unobstructed Discharge Required: Yes ☒ No ☐

Authority for Requirement: Iowa DNR Construction Permit 00-A-863-S3

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP 19b

Associated Equipment

Associated Emission Unit ID Numbers: 19b

Emission Unit vented through this Emission Point: 19b

Emission Unit Description: Primer Oven Drying Zone

Raw Material/Fuel: NA

Rated Capacity: 4,700 units/acfm

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 80 tons/yr ⁽¹⁾

⁽¹⁾ Limit requested by Pella Corp. to restrict potential VOC emissions from Paint kitchen (EU-16), Spray Booth #1 (EU-17), Spray Booth #2 (EU-18), Primer/Topcoat Oven (EU-19a, b, c), Dry Filter Work Booth (EU-20), Paint Kitchen (EU-21), Spray Paint Booth #3 (EU-22), Spray Booth #4 (EU-23), Topcoat Oven (EU-24a, b, c), Dry Filter Work Booth (EU-25), UV-Coater (EU-27a, c), and UV-Coater (EU-28a, b).

Authority for Requirement: Iowa DNR Construction Permit 00-A-864-S3

Pollutant: Total Organic Hazardous Air Pollutant (HAP)

Emission Limit(s): 0.48 lb HAP/gallon Solids ⁽²⁾

⁽²⁾ Emission limit imposed on Paint kitchen (EU-16), Spray Booth #1 (EU-17), Spray Booth #2 (EU-18), Primer/Topcoat Oven (EU-19a, b, c), Dry Filter Work Booth (EU-20), Paint Kitchen (EU-21), Spray Paint Booth #3 (EU-22), Spray Booth #4 (EU-23), Topcoat Oven (EU-24a, b, c), Dry Filter Work Booth (EU-25), and UV-Coater (EU-27a, c).

Authority for Requirement: Iowa DNR Construction Permit 00-A-864-S3

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Subject to 40 CFR Part 63 Subpart B-Requirements for Control Technology Determination for Major Sources in Accordance with Clean Air Act, Section 112(g):

See Plant-Wide Conditions.

Authority for Requirement: Iowa DNR Construction Permit 00-A-864-S3

567 IAC 23.1(4)"b"(1)

40 CFR Part 63 Subpart B

Emission Point Characteristics

This emission point shall conform to the conditions listed below.

Stack Height (feet): 28

Stack Diameter (inches): 24

Stack Exhaust Flow Rate (scfm): 4700

Stack Temperature (°F): 125

Vertical, Unobstructed Discharge Required: Yes ☒ No ☐

Authority for Requirement: Iowa DNR Construction Permit 00-A-864-S3

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP 19c

Associated Equipment

Associated Emission Unit ID Numbers: 19c

Emission Unit vented through this Emission Point: 19c

Emission Unit Description: Primer Oven Cooling Zone

Raw Material/Fuel: NA

Rated Capacity: 5,900 units/acfm

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 80 tons/yr ⁽¹⁾

⁽¹⁾ Limit requested by Pella Corp. to restrict potential VOC emissions from Paint kitchen (EU-16), Spray Booth #1 (EU-17), Spray Booth #2 (EU-18), Primer/Topcoat Oven (EU-19a, b, c), Dry Filter Work Booth (EU-20), Paint Kitchen (EU-21), Spray Paint Booth #3 (EU-22), Spray Booth #4 (EU-23), Topcoat Oven (EU-24a, b, c), Dry Filter Work Booth (EU-25), UV-Coater (EU-27a, c), and UV-Coater (EU-28a, b).

Authority for Requirement: Iowa DNR Construction Permit 00-A-865-S3

Pollutant: Total Organic Hazardous Air Pollutant (HAP)

Emission Limit(s): 0.48 lb HAP/gallon Solids ⁽²⁾

⁽²⁾ Emission limit imposed on Paint kitchen (EU-16), Spray Booth #1 (EU-17), Spray Booth #2 (EU-18), Primer/Topcoat Oven (EU-19a, b, c), Dry Filter Work Booth (EU-20), Paint Kitchen (EU-21), Spray Paint Booth #3 (EU-22), Spray Booth #4 (EU-23), Topcoat Oven (EU-24a, b, c), Dry Filter Work Booth (EU-25), and UV-Coater (EU-27a, c).

Authority for Requirement: Iowa DNR Construction Permit 00-A-865-S3

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Subject to 40 CFR Part 63 Subpart B-Requirements for Control Technology Determination for Major Sources in Accordance with Clean Air Act, Section 112(g):

See Plant-Wide Conditions.

Authority for Requirement: Iowa DNR Construction Permit 00-A-865-S3

567 IAC 23.1(4)"b"(1)

40 CFR Part 63 Subpart B

Emission Point Characteristics

This emission point shall conform to the conditions listed below.

Stack Height (feet): 28

Stack Diameter (inches): 18

Stack Exhaust Flow Rate (scfm): 5,900

Stack Temperature (°F): 110

Vertical, Unobstructed Discharge Required: Yes ☒ No ☐

Authority for Requirement: Iowa DNR Construction Permit 00-A-865-S3

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP 20

Associated Equipment

Associated Emission Unit ID Numbers: 20
Emissions Control Equipment ID Number: CE-20
Emissions Control Equipment Description: Dry Filters

Emission Unit vented through this Emission Point: 20
Emission Unit Description: Primer Dry Filter Work Booth
Raw Material/Fuel: Paint
Rated Capacity: 2000 units/scfm

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40 % ⁽¹⁾

⁽¹⁾ An exceedance of the indicator opacity of “No Visible Emissions” will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Authority for Requirement: Iowa DNR Construction Permit 00-A-866-S3
567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.1 gr./scf

Authority for Requirement: Iowa DNR Construction Permit 00-A-866-S3
567 IAC 23.4(13)

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 80 tons/yr ⁽²⁾

⁽²⁾ Limit requested by Pella Corp. to restrict potential VOC emissions from Paint kitchen (EU-16), Spray Booth #1 (EU-17), Spray Booth #2 (EU-18), Primer/Topcoat Oven (EU-19a, b, c), Dry Filter Work Booth (EU-20), Paint Kitchen (EU-21), Spray Paint Booth #3 (EU-22), Spray Booth #4 (EU-23), Topcoat Oven (EU-24a, b, c), Dry Filter Work Booth (EU-25), UV-Coater (EU-27a, c), and UV-Coater (EU-28a, b).

Authority for Requirement: Iowa DNR Construction Permit 00-A-866-S3

Pollutant: Total Organic Hazardous Air Pollutants (HAP)

Emission Limit(s): 0.48 lb HAP/gallon Solids ⁽³⁾

⁽³⁾ Emission limit imposed on Paint kitchen (EU-16), Spray Booth #1 (EU-17), Spray Booth #2 (EU-18), Primer/Topcoat Oven (EU-19a, b, c), Dry Filter Work Booth (EU-20), Paint Kitchen (EU-21), Spray Paint Booth #3 (EU-22), Spray Booth #4 (EU-23), Topcoat Oven (EU-24a, b, c), Dry Filter Work Booth (EU-25), and UV-Coater (EU-27a, c).

Authority for Requirement: Iowa DNR Construction Permit 00-A-866-S3

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Subject to 40 CFR Part 63 Subpart B-Requirements for Control Technology Determination for Major Sources in Accordance with Clean Air Act, Section 112(g):

See Plant-Wide Conditions.

Authority for Requirement: Iowa DNR Construction Permit 00-A-866-S3

567 IAC 23.1(4)"b"(1)

40 CFR Part 63 Subpart B

Emission Point Characteristics

This emission point shall conform to the conditions listed below.

Stack Height (feet): 28

Stack Diameter (inches): 18

Stack Exhaust Flow Rate (scfm): 2000

Stack Temperature (°F): Ambient

Vertical, Unobstructed Discharge Required: Yes ☒ No ☐

Authority for Requirement: Iowa DNR Construction Permit 00-A-866-S3

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP 21

Associated Equipment

Associated Emission Unit ID Numbers: 21

Emission Unit vented through this Emission Point: 21

Emission Unit Description: Topcoat Paint Kitchen

Raw Material/Fuel: Paint

Rated Capacity: 387 units/scfm

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 80 tons/yr ⁽¹⁾

⁽¹⁾ Limit requested by Pella Corp. to restrict potential VOC emissions from Paint kitchen (EU-16), Spray Booth #1 (EU-17), Spray Booth #2 (EU-18), Primer/Topcoat Oven (EU-19a, b, c), Dry Filter Work Booth (EU-20), Paint Kitchen (EU-21), Spray Paint Booth #3 (EU-22), Spray Booth #4 (EU-23), Topcoat Oven (EU-24a, b, c), Dry Filter Work Booth (EU-25), UV-Coater (EU-27a, c), and UV-Coater (EU-28a, b).

Authority for Requirement: Iowa DNR Construction Permit 00-A-867-S3

Pollutant: Total Organic Hazardous Air Pollutant (HAP)

Emission Limit(s): 0.48 lb HAP/gallon Solids ⁽²⁾

⁽²⁾ Emission limit imposed on Paint kitchen (EU-16), Spray Booth #1 (EU-17), Spray Booth #2 (EU-18), Primer/Topcoat Oven (EU-19a, b, c), Dry Filter Work Booth (EU-20), Paint Kitchen (EU-21), Spray Paint Booth #3 (EU-22), Spray Booth #4 (EU-23), Topcoat Oven (EU-24a, b, c), Dry Filter Work Booth (EU-25), and UV-Coater (EU-27a, c).

Authority for Requirement: Iowa DNR Construction Permit 00-A-867-S3

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Subject to 40 CFR Part 63 Subpart B-Requirements for Control Technology Determination for Major Sources in Accordance with Clean Air Act, Section 112(g):

See Plant-Wide Conditions.

Authority for Requirement: Iowa DNR Construction Permit 00-A-867-S3

567 IAC 23.1(4)"b"(1)

40 CFR Part 63 Subpart B

Emission Point Characteristics

This emission point shall conform to the conditions listed below.

Stack Height (feet): 28

Stack Diameter (inches): 12

Stack Exhaust Flow Rate (scfm): 387

Stack Temperature (°F): Ambient

Vertical, Unobstructed Discharge Required: Yes ☒ No ☐

Authority for Requirement: Iowa DNR Construction Permit 00-A-867-S3

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP 22

Associated Equipment

Associated Emission Unit ID Numbers: 22

Emissions Control Equipment ID Number: CE-22

Emissions Control Equipment Description: Dry Filters

Emission Unit vented through this Emission Point: 22

Emission Unit Description: Topcoat Spray Booth #3

Raw Material/Fuel: Paint

Rated Capacity: 5.67 gal/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40 % ⁽¹⁾

⁽¹⁾ An exceedance of the indicator opacity of “No Visible Emissions” will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Authority for Requirement: Iowa DNR Construction Permit 00-A-868-S3
567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.01 gr./scf

Authority for Requirement: Iowa DNR Construction Permit 00-A-868-S3
567 IAC 23.4(13)

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 80 tons/yr ⁽²⁾

⁽²⁾ Limit requested by Pella Corp. to restrict potential VOC emissions from Paint kitchen (EU-16), Spray Booth #1 (EU-17), Spray Booth #2 (EU-18), Primer/Topcoat Oven (EU-19a, b, c), Dry Filter Work Booth (EU-20), Paint Kitchen (EU-21), Spray Paint Booth #3 (EU-22), Spray Booth #4 (EU-23), Topcoat Oven (EU-24a, b, c), Dry Filter Work Booth (EU-25), UV-Coater (EU-27a, c), and UV-Coater (EU-28a, b).

Authority for Requirement: Iowa DNR Construction Permit 00-A-868-S3

Pollutant: Total Organic Hazardous Air Pollutants (HAP)

Emission Limit(s): 0.48 lb HAP/gallon Solids ⁽³⁾

⁽³⁾ Emission limit imposed on Paint kitchen (EU-16), Spray Booth #1 (EU-17), Spray Booth #2 (EU-18), Primer/Topcoat Oven (EU-19a, b, c), Dry Filter Work Booth (EU-20), Paint Kitchen (EU-21), Spray Paint Booth #3 (EU-22), Spray Booth #4 (EU-23), Topcoat Oven (EU-24a, b, c), Dry Filter Work Booth (EU-25), and UV-Coater (EU-27a, c).

Authority for Requirement: Iowa DNR Construction Permit 00-A-868-S3

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Subject to 40 CFR Part 63 Subpart B-Requirements for Control Technology Determination for Major Sources in Accordance with Clean Air Act, Section 112(g):

See Plant-Wide Conditions.

Authority for Requirement: Iowa DNR Construction Permit 00-A-868-S3

567 IAC 23.1(4)"b"(1)

40 CFR Part 63 Subpart B

Emission Point Characteristics

This emission point shall conform to the conditions listed below.

Stack Height (feet): 28

Stack Diameter (inches): 16

Stack Exhaust Flow Rate (scfm): 4400

Stack Temperature (°F): Ambient

Vertical, Unobstructed Discharge Required: Yes ☒ No ☐

Authority for Requirement: Iowa DNR Construction Permit 00-A-868-S3

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Stack Testing:

Pollutant – Particulate Matter

1st Stack Test to be Completed by ~~10/04/07~~⁽¹⁾

Test Method – Iowa Compliance Sampling Manual Method 5

Authority for Requirement – 567 IAC 22.108(3)

⁽¹⁾ The two stack tests done on May 15 and July 16/17, 2007 for EP 17 have satisfied the testing requirements for EP 18, EP 22, & EP 23.

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Paint Booth Agency Operation & Maintenance Plan

Weekly

- Inspect the paint booth system for conditions that reduce the operating efficiency of the collection system. This will include a visual inspection of the condition of the filter material.
- Maintain a written record of the observation and any action resulting from the inspection.

Record Keeping and Reporting

- Maintenance and inspection records will be kept for five years and available upon request.

Quality Control

- The filter equipment will be operated and maintained according to the manufacturer's recommendations.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP 23

Associated Equipment

Associated Emission Unit ID Numbers: 23
Emissions Control Equipment ID Number: CE-23
Emissions Control Equipment Description: Dry Filters

Emission Unit vented through this Emission Point: 23
Emission Unit Description: Topcoat Spray Booth #4
Raw Material/Fuel: Paint
Rated Capacity: 5.67 gal/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40 % ⁽¹⁾

⁽¹⁾ An exceedance of the indicator opacity of “No Visible Emissions” will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Authority for Requirement: Iowa DNR Construction Permit 00-A-869-S3
567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.01 gr./scf

Authority for Requirement: Iowa DNR Construction Permit 00-A-869-S3
567 IAC 23.4(13)

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 80 tons/yr ⁽²⁾

⁽²⁾ Limit requested by Pella Corp. to restrict potential VOC emissions from Paint kitchen (EU-16), Spray Booth #1 (EU-17), Spray Booth #2 (EU-18), Primer/Topcoat Oven (EU-19a, b, c), Dry Filter Work Booth (EU-20), Paint Kitchen (EU-21), Spray Paint Booth #3 (EU-22), Spray Booth #4 (EU-23), Topcoat Oven (EU-24a, b, c), Dry Filter Work Booth (EU-25), UV-Coater (EU-27a, c), and UV-Coater (EU-28a, b).

Authority for Requirement: Iowa DNR Construction Permit 00-A-869-S3

Pollutant: Total Organic Hazardous Air Pollutants (HAP)

Emission Limit(s): 0.48 lb HAP/gallon Solids ⁽³⁾

⁽³⁾ Emission limit imposed on Paint kitchen (EU-16), Spray Booth #1 (EU-17), Spray Booth #2 (EU-18), Primer/Topcoat Oven (EU-19a, b, c), Dry Filter Work Booth (EU-20), Paint Kitchen (EU-21), Spray Paint Booth #3 (EU-22), Spray Booth #4 (EU-23), Topcoat Oven (EU-24a, b, c), Dry Filter Work Booth (EU-25), and UV-Coater (EU-27a, c).

Authority for Requirement: Iowa DNR Construction Permit 00-A-869-S3

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Subject to 40 CFR Part 63 Subpart B-Requirements for Control Technology Determination for Major Sources in Accordance with Clean Air Act, Section 112(g):

See Plant-Wide Conditions.

Authority for Requirement: Iowa DNR Construction Permit 00-A-869-S3

567 IAC 23.1(4)"b"(1)

40 CFR Part 63 Subpart B

Emission Point Characteristics

This emission point shall conform to the conditions listed below.

Stack Height (feet): 28

Stack Diameter (inches): 16

Stack Exhaust Flow Rate (scfm): 4400

Stack Temperature (°F): Ambient

Vertical, Unobstructed Discharge Required: Yes ☒ No ☐

Authority for Requirement: Iowa DNR Construction Permit 00-A-869-S3

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Stack Testing:

Pollutant – Particulate Matter

1st Stack Test to be Completed by ~~10/04/07~~⁽¹⁾

Test Method – Iowa Compliance Sampling Manual Method 5

Authority for Requirement – 567 IAC 22.108(3)

⁽¹⁾ The two stack tests done on May 15 and July 16/17, 2007 for EP 17 have satisfied the testing requirements for EP 18, EP 22, & EP 23.

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Paint Booth Agency Operation & Maintenance Plan

Weekly

- Inspect the paint booth system for conditions that reduce the operating efficiency of the collection system. This will include a visual inspection of the condition of the filter material.
- Maintain a written record of the observation and any action resulting from the inspection.

Record Keeping and Reporting

- Maintenance and inspection records will be kept for five years and available upon request.

Quality Control

- The filter equipment will be operated and maintained according to the manufacturer's recommendations.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP 24a

Associated Equipment

Associated Emission Unit ID Numbers: 24a

Emission Unit vented through this Emission Point: 24a

Emission Unit Description: Topcoat Oven Flash Zone

Raw Material/Fuel: Paint

Rated Capacity: 3,370 units/acfm

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 80 tons/yr ⁽¹⁾

⁽¹⁾ Limit requested by Pella Corp. to restrict potential VOC emissions from Paint kitchen (EU-16), Spray Booth #1 (EU-17), Spray Booth #2 (EU-18), Primer/Topcoat Oven (EU-19a, b, c), Dry Filter Work Booth (EU-20), Paint Kitchen (EU-21), Spray Paint Booth #3 (EU-22), Spray Booth #4 (EU-23), Topcoat Oven (EU-24a, b, c), Dry Filter Work Booth (EU-25), UV-Coater (EU-27a, c), and UV-Coater (EU-28a, b).

Authority for Requirement: Iowa DNR Construction Permit 00-A-870-S3

Pollutant: Total Organic Hazardous Air Pollutant (HAP)

Emission Limit(s): 0.48 lb HAP/gallon Solids ⁽²⁾

⁽²⁾ Emission limit imposed on Paint kitchen (EU-16), Spray Booth #1 (EU-17), Spray Booth #2 (EU-18), Primer/Topcoat Oven (EU-19a, b, c), Dry Filter Work Booth (EU-20), Paint Kitchen (EU-21), Spray Paint Booth #3 (EU-22), Spray Booth #4 (EU-23), Topcoat Oven (EU-24a, b, c), Dry Filter Work Booth (EU-25), and UV-Coater (EU-27a, c).

Authority for Requirement: Iowa DNR Construction Permit 00-A-870-S3

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Subject to 40 CFR Part 63 Subpart B-Requirements for Control Technology Determination for Major Sources in Accordance with Clean Air Act, Section 112(g):

See Plant-Wide Conditions.

Authority for Requirement: Iowa DNR Construction Permit 00-A-870-S3

567 IAC 23.1(4)"b"(1)

40 CFR Part 63 Subpart B

Emission Point Characteristics

This emission point shall conform to the conditions listed below.

Stack Height (feet): 28

Stack Diameter (inches): 16

Stack Exhaust Flow Rate (scfm): 3,500

Stack Temperature (°F): 100

Vertical, Unobstructed Discharge Required: Yes ☒ No ☐

Authority for Requirement: Iowa DNR Construction Permit 00-A-870-S3

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP 24b

Associated Equipment

Associated Emission Unit ID Numbers: 24b

Applicable Requirements

Emission Unit vented through this Emission Point: 24b

Emission Unit Description: Topcoat Oven Drying Zone

Raw Material/Fuel: Paint

Rated Capacity: 5,188 units/acfm

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 80 tons/yr ⁽¹⁾

⁽¹⁾ Limit requested by Pella Corp. to restrict potential VOC emissions from Paint kitchen (EU-16), Spray Booth #1 (EU-17), Spray Booth #2 (EU-18), Primer/Topcoat Oven (EU-19a, b, c), Dry Filter Work Booth (EU-20), Paint Kitchen (EU-21), Spray Paint Booth #3 (EU-22), Spray Booth #4 (EU-23), Topcoat Oven (EU-24a, b, c), Dry Filter Work Booth (EU-25), UV-Coater (EU-27a, c), and UV-Coater (EU-28a, b).

Authority for Requirement: Iowa DNR Construction Permit 00-A-871-S3

Pollutant: Total Organic Hazardous Air Pollutant (HAP)

Emission Limit(s): 0.48 lb HAP/gallon Solids ⁽²⁾

⁽²⁾ Emission limit imposed on Paint kitchen (EU-16), Spray Booth #1 (EU-17), Spray Booth #2 (EU-18), Primer/Topcoat Oven (EU-19a, b, c), Dry Filter Work Booth (EU-20), Paint Kitchen (EU-21), Spray Paint Booth #3 (EU-22), Spray Booth #4 (EU-23), Topcoat Oven (EU-24a, b, c), Dry Filter Work Booth (EU-25), and UV-Coater (EU-27a, c).

Authority for Requirement: Iowa DNR Construction Permit 00-A-871-S3

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Subject to 40 CFR Part 63 Subpart B-Requirements for Control Technology Determination for Major Sources in Accordance with Clean Air Act, Section 112(g):

See Plant-Wide Conditions.

Authority for Requirement: Iowa DNR Construction Permit 00-A-871-S3
567 IAC 23.1(4)"b"(1)
40 CFR Part 63 Subpart B

Emission Point Characteristics

This emission point shall conform to the conditions listed below.

Stack Height (feet): 28

Stack Diameter (inches): 24

Stack Exhaust Flow Rate (scfm): 4700

Stack Temperature (°F): 125

Vertical, Unobstructed Discharge Required: Yes ☒ No ☐

Authority for Requirement: Iowa DNR Construction Permit 00-A-871-S3

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP 24c

Associated Equipment

Associated Emission Unit ID Numbers: 24c

Emission Unit vented through this Emission Point: 24c
Emission Unit Description: Topcoat Oven Cooling Zone
Raw Material/Fuel: Paint
Rated Capacity: 6,330 units/acfm

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 80 tons/yr ⁽¹⁾

⁽¹⁾ Limit requested by Pella Corp. to restrict potential VOC emissions from Paint kitchen (EU-16), Spray Booth #1 (EU-17), Spray Booth #2 (EU-18), Primer/Topcoat Oven (EU-19a, b, c), Dry Filter Work Booth (EU-20), Paint Kitchen (EU-21), Spray Paint Booth #3 (EU-22), Spray Booth #4 (EU-23), Topcoat Oven (EU-24a, b, c), Dry Filter Work Booth (EU-25), UV-Coater (EU-27a, c), and UV-Coater (EU-28a, b).

Authority for Requirement: Iowa DNR Construction Permit 00-A-872-S3

Pollutant: Total Organic Hazardous Air Pollutant (HAP)

Emission Limit(s): 0.48 lb HAP/gallon Solids ⁽²⁾

⁽²⁾ Emission limit imposed on Paint kitchen (EU-16), Spray Booth #1 (EU-17), Spray Booth #2 (EU-18), Primer/Topcoat Oven (EU-19a, b, c), Dry Filter Work Booth (EU-20), Paint Kitchen (EU-21), Spray Paint Booth #3 (EU-22), Spray Booth #4 (EU-23), Topcoat Oven (EU-24a, b, c), Dry Filter Work Booth (EU-25), and UV-Coater (EU-27a, c).

Authority for Requirement: Iowa DNR Construction Permit 00-A-872-S3

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Subject to 40 CFR Part 63 Subpart B-Requirements for Control Technology Determination for Major Sources in Accordance with Clean Air Act, Section 112(g):

See Plant-Wide Conditions.

Authority for Requirement: Iowa DNR Construction Permit 00-A-872-S3
567 IAC 23.1(4)"b"(1)
40 CFR Part 63 Subpart B

Emission Point Characteristics

This emission point shall conform to the conditions listed below.

Stack Height (feet): 28

Stack Diameter (inches): 18

Stack Exhaust Flow Rate (scfm): 5900

Stack Temperature (°F): 110

Vertical, Unobstructed Discharge Required: Yes ☒ No ☐

Authority for Requirement: Iowa DNR Construction Permit 00-A-872-S3

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP 25

Associated Equipment

Associated Emission Unit ID Numbers: 25
Emissions Control Equipment ID Number: CE-25
Emissions Control Equipment Description: Dry Filters

Emission Unit vented through this Emission Point: 25
Emission Unit Description: Topcoat Dry Filter Work Booth
Raw Material/Fuel: Paint
Rated Capacity: 2,000 units/acfm

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40 % ⁽¹⁾

⁽¹⁾ An exceedance of the indicator opacity of “No Visible Emissions” will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Authority for Requirement: Iowa DNR Construction Permit 00-A-873-S3
567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.1 gr./scf

Authority for Requirement: Iowa DNR Construction Permit 00-A-873-S3
567 IAC 23.3(2)"a"

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 80 tons/yr ⁽²⁾

⁽²⁾ Limit requested by Pella Corp. to restrict potential VOC emissions from Paint kitchen (EU-16), Spray Booth #1 (EU-17), Spray Booth #2 (EU-18), Primer/Topcoat Oven (EU-19a, b, c), Dry Filter Work Booth (EU-20), Paint Kitchen (EU-21), Spray Paint Booth #3 (EU-22), Spray Booth #4 (EU-23), Topcoat Oven (EU-24a, b, c), Dry Filter Work Booth (EU-25), UV-Coater (EU-27a, c), and UV-Coater (EU-28a, b).

Authority for Requirement: Iowa DNR Construction Permit 00-A-873-S3

Pollutant: Total Organic Hazardous Air Pollutants (HAP)

Emission Limit(s): 0.48 lb HAP/gallon Solids ⁽³⁾

⁽³⁾ Emission limit imposed on Paint kitchen (EU-16), Spray Booth #1 (EU-17), Spray Booth #2 (EU-18), Primer/Topcoat Oven (EU-19a, b, c), Dry Filter Work Booth (EU-20), Paint Kitchen (EU-21), Spray Paint Booth #3 (EU-22), Spray Booth #4 (EU-23), Topcoat Oven (EU-24a, b, c), Dry Filter Work Booth (EU-25), and UV-Coater (EU-27a, c).

Authority for Requirement: Iowa DNR Construction Permit 00-A-873-S3

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Subject to 40 CFR Part 63 Subpart B-Requirements for Control Technology Determination for Major Sources in Accordance with Clean Air Act, Section 112(g):

See Plant-Wide Conditions.

Authority for Requirement: Iowa DNR Construction Permit 00-A-873-S3

567 IAC 23.1(4)"b"(1)

40 CFR Part 63 Subpart B

Emission Point Characteristics

This emission point shall conform to the conditions listed below.

Stack Height (feet): 28

Stack Diameter (inches): 18

Stack Exhaust Flow Rate (scfm): 2000

Stack Temperature (°F): Ambient

Vertical, Unobstructed Discharge Required: Yes ☒ No ☐

Authority for Requirement: Iowa DNR Construction Permit 00-A-873-S3

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP 26

Associated Equipment

Associated Emission Unit ID Numbers: 26

Emissions Control Equipment ID Number: CE-26

Emissions Control Equipment Description: Fabric Filter Dust Collector (Baghouse)

Emission Unit vented through this Emission Point: 26

Emission Unit Description: Sander System

Raw Material/Fuel: N/A

Rated Capacity: 18,200 units/scfm

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

⁽¹⁾ An exceedance of the indicator opacity of “No Visible Emissions” will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Authority for Requirement: 567 IAC 23.3(2)"d"

Iowa DNR Construction Permit 00-A-874-S1

Pollutant: PM₁₀

Emission Limit(s): 1.5 lbs/hr

Authority for Requirement: Iowa DNR Construction Permit 00-A-874-S1

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.1 gr/scf

Authority for Requirement: 567 IAC 23.3(2)"a"

Iowa DNR Construction Permit 00-A-874-S1

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Control equipment parameters:

Maintain Fabric Filter Dust Collector (CE 26) according to manufacturer specifications and maintenance schedule.

Reporting & Record keeping:

Maintain a record of all inspections/maintenance and any action resulting from the inspection/maintenance of Fabric Filter Dust Collector (CE 26).

Authority for Requirement: Iowa DNR Construction Permit 00-A-874-S1

Emission Point Characteristics

This emission point shall conform to the conditions listed below.

Stack Height (feet): 26

Stack Diameter (inches): 26

Stack Exhaust Flow Rate (scfm): 25,087

Stack Temperature (°F): Ambient

Horizontal, Unobstructed Discharge Required: Yes ☒ No ☐

Authority for Requirement: Iowa DNR Construction Permit 00-A-874-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Baghouse Agency Operation & Maintenance Plan

Monitoring Guidelines

The facility makes a commitment to take timely corrective action during periods of excursion where the indicators are out of range. A corrective action may include an investigation of the reason for the excursion, evaluation of the situation and necessary follow-up action to return operation within the indicator range. An excursion is determined by the averaged discrete data point over a period of time. An excursion does not necessarily indicate a violation of an applicable requirement. If the corrective action measures fail to return the indicators to the appropriate range, the facility will report the exceedence to the department and conduct source testing within 90 days of the exceedence to demonstrate compliance with applicable requirements. If the test demonstrates compliance with emission limits then new indicator ranges must be set for monitoring and the new ranges must be incorporated in the operating permit. If the test demonstrates noncompliance with emission limits, then the facility, within 60 days, proposes a schedule to implement corrective action to bring the source into compliance and demonstrate compliance.

General

Periodic Monitoring is not required during periods of time greater than one day in which the source does not operate.

Weekly

- Visible emissions shall be observed on a weekly basis to ensure no visible emissions during the material handling operation of the unit. If visible emissions are observed this would be an exceedence not a violation and corrective action will be taken as soon as possible, but no later than 8 hours. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2 hour intervals throughout the day. If unsuccessful that day due to weather, an observation shall be made the following day.
- Check and document the baghouse pressure drop. If the pressure drop falls out of the normal operating range, 0.75 - 3.0, corrective action will be taken within 8 hours to return the pressure drop to normal.

Maintain a written record of the observation and any action resulting from the inspection.

Monthly

- Check the cleaning sequence of the baghouse.
- Check the hopper functions and performance.

If leaks or abnormal conditions are detected the appropriate measures for remediation will be implemented within eight (8) hours. Maintain a written record of the inspection and any action resulting from the inspection.

Quarterly

- Thoroughly inspect bags for leaks and wear. (Look for obvious holes or tears in the bags.) If leaks or abnormal conditions are detected, the appropriate measures for remediation will be implemented within eight (8) hours. Bag replacement should be documented by identifying the date, time and location of the bag in relationship to the other bags. Maintain a written record of the inspection and any action resulting from the inspection.

Semiannual

- Inspect every 6 months all components that are not subject to wear or plugging, including structural components, housing, ducts and hoods.

If leaks or abnormal conditions are detected the appropriate measures for remediation will be implemented within eight (8) hours. Maintain a written record of the inspection and any action resulting from the inspection.

Record Keeping and Reporting

Maintenance and inspection records will be kept for five years and available upon request.

Quality Control

The filter equipment will be operated and maintained according to the manufacturers recommendations.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP 27a

Associated Equipment

Associated Emission Unit ID Numbers: 27a

Emission Unit vented through this Emission Point: 27a

Emission Unit Description: UV Vacuum Coater Primer

Raw Material/Fuel: UV Resin

Rated Capacity: 3.0 gal./yr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40 % ⁽¹⁾

⁽¹⁾ An exceedance of the indicator opacity of “No Visible Emissions” will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Authority for Requirement: Iowa DNR Construction Permit 02-A-367-S2
567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.01 gr./scf

Authority for Requirement: Iowa DNR Construction Permit 02-A-367-S2
567 IAC 23.4(13)

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 80 tons/yr ⁽²⁾

⁽²⁾ Limit requested by Pella Corp. to restrict potential VOC emissions from Paint kitchen (EU-16), Spray Booth #1 (EU-17), Spray Booth #2 (EU-18), Primer/Topcoat Oven (EU-19a, b, c), Dry Filter Work Booth (EU-20), Paint Kitchen (EU-21), Spray Paint Booth #3 (EU-22), Spray Booth #4 (EU-23), Topcoat Oven (EU-24a, b, c), Dry Filter Work Booth (EU-25), UV-Coater (EU-27a, c), and UV-Coater (EU-28a, b).

Authority for Requirement: Iowa DNR Construction Permit 02-A-367-S2

Pollutant: Total Organic Hazardous Air Pollutants (HAP)

Emission Limit(s): 0.48 lb HAP/gallon Solids ⁽³⁾

⁽³⁾ Emission limit imposed on Paint kitchen (EU-16), Spray Booth #1 (EU-17), Spray Booth #2 (EU-18), Primer/Topcoat Oven (EU-19a, b, c), Dry Filter Work Booth (EU-20), Paint Kitchen (EU-21), Spray Paint Booth #3 (EU-22), Spray Booth #4 (EU-23), Topcoat Oven (EU-24a, b, c), Dry Filter Work Booth (EU-25), and UV-Coater (EU-27a, c).

Authority for Requirement: Iowa DNR Construction Permit 02-A-367-S2

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Subject to 40 CFR Part 63 Subpart B-Requirements for Control Technology Determination for Major Sources in Accordance with Clean Air Act, Section 112(g):

See Plant-Wide Conditions.

Authority for Requirement: Iowa DNR Construction Permit 02-A-367-S2

567 IAC 23.1(4)"b"(1)

40 CFR Part 63 Subpart B

Emission Point Characteristics

This emission point shall conform to the conditions listed below.

Stack Height (feet): 28

Stack Diameter (inches): 6

Stack Exhaust Flow Rate (scfm): 420

Stack Temperature (°F): Ambient

Vertical, Unobstructed Discharge Required: Yes ☐ No ☒

Authority for Requirement: Iowa DNR Construction Permit 02-A-367-S2

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP 27c

Associated Equipment

Associated Emission Unit ID Numbers: 27c

Emission Unit vented through this Emission Point: 27c

Emission Unit Description: UV Cure Oven

Raw Material/Fuel: NA

Rated Capacity: 3.0 gal./yr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40 % ⁽¹⁾

⁽¹⁾ An exceedance of the indicator opacity of “No Visible Emissions” will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Authority for Requirement: Iowa DNR Construction Permit 02-A-369-S1
567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.01 gr./scf

Authority for Requirement: Iowa DNR Construction Permit 02-A-369-S1
567 IAC 23.4(13)

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 80 tons/yr ⁽²⁾

⁽²⁾ Limit requested by Pella Corp. to restrict potential VOC emissions from Paint kitchen (EU-16), Spray Booth #1 (EU-17), Spray Booth #2 (EU-18), Primer/Topcoat Oven (EU-19a, b, c), Dry Filter Work Booth (EU-20), Paint Kitchen (EU-21), Spray Paint Booth #3 (EU-22), Spray Booth #4 (EU-23), Topcoat Oven (EU-24a, b, c), Dry Filter Work Booth (EU-25), UV-Coater (EU-27a, c), and UV-Coater (EU-28a, b).

Authority for Requirement: Iowa DNR Construction Permit 02-A-369-S1

Pollutant: Total Organic Hazardous Air Pollutants (HAP)

Emission Limit(s): 0.48 lb HAP/gallon Solids ⁽³⁾

⁽³⁾ Emission limit imposed on Paint kitchen (EU-16), Spray Booth #1 (EU-17), Spray Booth #2 (EU-18), Primer/Topcoat Oven (EU-19a, b, c), Dry Filter Work Booth (EU-20), Paint Kitchen (EU-21), Spray Paint Booth #3 (EU-22), Spray Booth #4 (EU-23), Topcoat Oven (EU-24a, b, c), Dry Filter Work Booth (EU-25), and UV-Coater (EU-27a, c).

Authority for Requirement: Iowa DNR Construction Permit 02-A-369-S1

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Subject to 40 CFR Part 63 Subpart B-Requirements for Control Technology Determination for Major Sources in Accordance with Clean Air Act, Section 112(g):

See Plant-Wide Conditions.

Authority for Requirement: Iowa DNR Construction Permit 02-A-369-S1

567 IAC 23.1(4)"b"(1)

40 CFR Part 63 Subpart B

Emission Point Characteristics

This emission point shall conform to the conditions listed below.

Stack Height (feet): 28

Stack Diameter (inches): 16

Stack Exhaust Flow Rate (scfm): 4,500

Stack Temperature (°F): Ambient

Vertical, Unobstructed Discharge Required: Yes ☐ No ☒

Authority for Requirement: Iowa DNR Construction Permit 02-A-369-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP 28a

Associated Equipment

Associated Emission Unit ID Numbers: 28a

Emission Unit vented through this Emission Point: 28a

Emission Unit Description: UV Coater

Raw Material/Fuel: UV Resin Coating

Rated Capacity: 3.0 gal/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40 % ⁽¹⁾

⁽¹⁾ An exceedance of the indicator opacity of “No Visible Emissions” will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Authority for Requirement: Iowa DNR Construction Permit 04-A-452-S1
567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.01 gr./scf

Authority for Requirement: Iowa DNR Construction Permit 04-A-452-S1
567 IAC 23.4(13)

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 80 tons/yr ⁽²⁾

⁽²⁾ Limit requested by Pella Corp. to restrict potential VOC emissions from Paint kitchen (EU-16), Spray Booth #1 (EU-17), Spray Booth #2 (EU-18), Primer/Topcoat Oven (EU-19a, b, c), Dry Filter Work Booth (EU-20), Paint Kitchen (EU-21), Spray Paint Booth #3 (EU-22), Spray Booth #4 (EU-23), Topcoat Oven (EU-24a, b, c), Dry Filter Work Booth (EU-25), UV-Coater (EU-27a, c), and UV-Coater (EU-28a, b).

Authority for Requirement: Iowa DNR Construction Permit 04-A-452-S1

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:

1. Coating materials applied in UV-Coater (EU28) shall contain no Hazardous Air Pollutants (HAPs) as defined in 40 CFR Part 63 §63.2 *Definitions*.

Reporting & Record keeping:

1. Paint Kitchen (EU-16), Spray Booth #1 (EU-17), Spray Booth #2 (EU-18), Primer/Topcoat Oven (EU-19a, b, c), Dry Filter Work Booth (EU-20), Paint Kitchen (EU-21), Spray Paint Booth #3 (EU-22), Spray Booth #4 (EU-23), Topcoat Oven (EU-24a, b, c), Dry Filter Work Booth (EU-25), UV-Coater (EU-27a, c), and UV-Coater (EU-28a, b) in gallons
2. Record the VOC content of all VOC containing materials (coating, primer, adhesive, solvent, etc.) used in Paint Kitchen (EU-16), Spray Booth #1 (EU-17), Spray Booth #2 (EU-18), Primer/Topcoat Oven (EU-19a, b, c), Dry Filter Work Booth (EU-20), Paint Kitchen (EU-21), Spray Paint Booth #3 (EU-22), Spray Booth #4 (EU-23), Topcoat Oven (EU-24a, b, c), Dry Filter Work Booth (EU-25), UV-Coater (EU-27a, c), and UV-Coater (EU-28a, b) in pounds per gallon.
3. Calculate and record on a monthly basis, total VOC emissions in tons from Paint Kitchen (EU-16), Spray Booth #1 (EU-17), Spray Booth #2 (EU-18), Primer/Topcoat Oven (EU-19a, b, c), Dry Filter Work Booth (EU-20), Paint Kitchen (EU-21), Spray Paint Booth #3 (EU-22), Spray Booth #4 (EU-23), Topcoat Oven (EU-24a, b, c), Dry Filter Work Booth (EU-25), UV-Coater (EU-27a, c), and UV-Coater (EU-28a, b). Calculate and record rolling 12-month totals.
4. Retain Material Safety Data Sheets (MSDS) for VOC containing materials (coating, primer, adhesive, solvent, etc.) used in Paint kitchen (EU-16), Spray Booth #1 (EU-17), Spray Booth #2 (EU-18), Primer/Topcoat Oven (EU-19a, b, c), Dry Filter Work Booth (EU-20), Paint Kitchen (EU-21), Spray Paint Booth #3 (EU-22), Spray Booth #4 (EU-23), Topcoat Oven (EU-24a, b, c), Dry Filter Work Booth (EU-25), UV-Coater (EU-27a, c), and UV-Coater (EU28).

Emission Point Characteristics

This emission point shall conform to the conditions listed below.

Stack Height (feet): 33

Stack Diameter (inches): 6

Stack Exhaust Flow Rate (scfm): 650

Stack Temperature (°F): Ambient

Vertical, Unobstructed Discharge Required: Yes ☒ No ☐

Authority for Requirement: Iowa DNR Construction Permit 04-A-452-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may

vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP 28b

Associated Equipment

Associated Emission Unit ID Numbers: 28b

Emission Unit vented through this Emission Point: 28b

Emission Unit Description: UV Coater

Raw Material/Fuel: UV Coatings

Rated Capacity: 3.0 gal/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40 % ⁽¹⁾

⁽¹⁾ An exceedance of the indicator opacity of “No Visible Emissions” will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Authority for Requirement: Iowa DNR Construction Permit 04-A-453-S1
567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.01 gr./scf

Authority for Requirement: Iowa DNR Construction Permit 04-A-453-S1
567 IAC 23.4(13)

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 80 tons/yr ⁽²⁾

⁽²⁾ Limit requested by Pella Corp. to restrict potential VOC emissions from Paint kitchen (EU-16), Spray Booth #1 (EU-17), Spray Booth #2 (EU-18), Primer/Topcoat Oven (EU-19a, b, c), Dry Filter Work Booth (EU-20), Paint Kitchen (EU-21), Spray Paint Booth #3 (EU-22), Spray Booth #4 (EU-23), Topcoat Oven (EU-24a, b, c), Dry Filter Work Booth (EU-25), UV-Coater (EU-27a, c), and UV-Coater (EU-28a, b).

Authority for Requirement: Iowa DNR Construction Permit 04-A-453-S1

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:

Coating materials applied in UV-Coater (EU28) shall contain no Hazardous Air Pollutants (HAPs) as defined in 40 CFR Part 63 §63.2 *Definitions*.

Reporting & Record keeping:

1. Paint Kitchen (EU-16), Spray Booth #1 (EU-17), Spray Booth #2 (EU-18), Primer/Topcoat Oven (EU-19a, b, c), Dry Filter Work Booth (EU-20), Paint Kitchen (EU-21), Spray Paint Booth #3 (EU-22), Spray Booth #4 (EU-23), Topcoat Oven (EU-24a, b, c), Dry Filter Work Booth (EU-25), UV-Coater (EU-27a, c), and UV-Coater (EU-28a, b) in gallons
2. Record the VOC content of all VOC containing materials (coating, primer, adhesive, solvent, etc.) used in Paint Kitchen (EU-16), Spray Booth #1 (EU-17), Spray Booth #2 (EU-18), Primer/Topcoat Oven (EU-19a, b, c), Dry Filter Work Booth (EU-20), Paint Kitchen (EU-21), Spray Paint Booth #3 (EU-22), Spray Booth #4 (EU-23), Topcoat Oven (EU-24a, b, c), Dry Filter Work Booth (EU-25), UV-Coater (EU-27a, c), and UV-Coater (EU-28a, b) in pounds per gallon.
3. Calculate and record on a monthly basis, total VOC emissions in tons from Paint Kitchen (EU-16), Spray Booth #1 (EU-17), Spray Booth #2 (EU-18), Primer/Topcoat Oven (EU-19a, b, c), Dry Filter Work Booth (EU-20), Paint Kitchen (EU-21), Spray Paint Booth #3 (EU-22), Spray Booth #4 (EU-23), Topcoat Oven (EU-24a, b, c), Dry Filter Work Booth (EU-25), UV-Coater (EU-27a, c), and UV-Coater (EU-28a, b). Calculate and record rolling 12-month totals.
4. Retain Material Safety Data Sheets (MSDS) for VOC containing materials (coating, primer, adhesive, solvent, etc.) used in Paint kitchen (EU-16), Spray Booth #1 (EU-17), Spray Booth #2 (EU-18), Primer/Topcoat Oven (EU-19a, b, c), Dry Filter Work Booth (EU-20), Paint Kitchen (EU-21), Spray Paint Booth #3 (EU-22), Spray Booth #4 (EU-23), Topcoat Oven (EU-24a, b, c), Dry Filter Work Booth (EU-25), UV-Coater (EU-27a, c), and UV-Coater (EU28).

Emission Point Characteristics

This emission point shall conform to the conditions listed below.

Stack Height (feet): 33

Stack Diameter (inches): 18

Stack Exhaust Flow Rate (scfm): 3,200

Stack Temperature (°F): Ambient

Vertical, Unobstructed Discharge Required: Yes ☒ No ☐

Authority for Requirement: Iowa DNR Construction Permit 04-A-453-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may

vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP CO

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): 7, 15

Emissions Control Equipment ID Number: CE CO

Emissions Control Equipment Description: Catalytic Oxidizer

Emission Unit vented through this Emission Point: 7

Emission Unit Description: Wood Treating - Drying Room

Raw Material/Fuel: Wood Preservative

Rated Capacity: 285,714 gal./yr

Emission Unit vented through this Emission Point: 15

Emission Unit Description: Line 4 Wood Dip Dry

Raw Material/Fuel: Wood Preservative

Rated Capacity: 285,714 gal./yr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

⁽¹⁾ Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedence of the indicator opacity of (10%) will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. The permit holder shall also file an "indicator opacity exceedence report" with the DNR field office and keep records as required in the policy. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Authority for Requirement: Iowa DNR Construction Permit 91-A-327-S5
567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limit(s): 0.01 gr./scf

Authority for Requirement: Iowa DNR Construction Permit 91-A-327-S5
567 IAC 23.4(13)

Pollutant: Volatile Organic Compounds (VOCs)

Emission Limit(s): 50 Tons/yr ⁽²⁾

⁽²⁾ Limit is based on operating limits, 95% destruction efficiency of the control equipment when EU7 and EU15 run through EP-CO, and is a bubble limit for the four emission points of EP-7A, EP-7B, EP-15, and EP-CO which is not to be exceeded in any combination of using the four emission points.

Authority for Requirement: Iowa DNR Construction Permit 91-A-327-S5

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:

1. The maximum VOC content of any preservative or mineral spirits added to the dip tanks serving the drying room (EU7) and Line 4 Wood Dip Dry (EU15) shall not exceed 7.0 pounds per gallon.
2. The maximum material usage for the dip tanks serving the drying room (EU7) and Line 4 Wood Dip Dry (EU15) shall not exceed 285,714 gallons in any continuous twelve (12) month period, rolled monthly. (Note: This is based on 7.00 lb/gal for the material, a 95% destruction efficiency, and a 50 ton per year limit.)
3. Maintain the catalytic oxidizer destruction efficiency at 95% or greater.
4. Maintain the catalytic oxidizer inlet temperature range to the main combustion chamber between 552 degrees Fahrenheit and 748 degrees Fahrenheit.

Reporting & Record keeping:

All records as required below, must be satisfactory for demonstrating compliance with all applicable operating limits. Records shall be maintained on site for five years and shall be available for inspection by the Department. Records shall be maintained in a legible and orderly manner and shall indicate the following:

1. The VOC content of any preservative or mineral spirits added to the dip tanks serving the drying room (EU7) and Line 4 Wood Dip Dry (EU15) in pounds per gallon.
2. The amount of preservative and mineral spirits added to the dip tank serving the drying room (EU7) and Line 4 Wood Dip Dry (EU15) in gallons on a daily basis.
3. The number of hours the by-pass stacks (EP-7A, EP-7B, and EP-15) are open to the atmosphere on a daily basis.
4. Calculate and record the total VOC amount in tons per month that are emitted by the catalytic oxidizer.
5. Calculate and record on a rolling 12-month basis the total emissions from EP-7A, EP-7B, EP-15, and EP-CO to ensure the total emissions do not exceed the 50 TPY limit.
6. The inlet temperature to the main combustion chamber to the catalytic oxidizer every hour.
7. Maintain a record of the maintenance on the catalytic oxidizer as recommended by the manufacturer's specifications.

Authority for Requirement: Iowa DNR Construction Permit 91-A-327-S5

Emission Point Characteristics

This emission point shall conform to the conditions listed below.

Stack Height (feet): 40

Stack Diameter (inches): 35

Stack Exhaust Flow Rate (scfm): 10,500

Stack Temperature (°F): 295 to 330

Vertical, Unobstructed Discharge Required: Yes ☒ No ☐

Authority for Requirement: Iowa DNR Construction Permit 91-A-327-S5

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☒ No ☐

Authority for Requirement: 567 IAC 22.108(3)

Compliance Assurance Monitoring for Catalytic Oxidizer for VOC Control

1. APPLICABILITY

- 1.1 Control Technology: Catalytic Oxidizer
- 1.2 Pollutants: Volatile organic compounds (VOC's)
- 1.3 Process/Emissions Unit: Dip/Dry Units, Vacuum Tank, and Drying Room
- 1.4 Applicable Regulation and Emission Limit
Iowa DNR Construction Permit: 91-A-327-S5
Emission Limit: Volatile Organic Compounds limited to 50 Tons/yr

2. MONITORING APPROACH DESCRIPTION

- 2.1 Parameters to be Monitored: Catalyst inlet gas stream temperatures between 553° F and 1000° F.
- 2.2 Rationale for Monitoring Approach
 - Catalyst inlet gas temperature: Allows determination of temperature of gas flowing into catalyst bed to ensure bed is maintained within the design temperature range to ensure 95% destruction efficiency.
 - The number of hours the by-pass stacks (EP7A, EP7B and EP15) are open to the atmosphere on a daily basis.
- 2.3 Monitoring Location:
 - Inlet gas temperature: Inlet temperature probe is immediately prior to the air stream entering the catalytic bed.

- 2.4 Analytical Devices Required
 - Inlet temperatures: Thermocouples as appropriate for specific gas stream.
- 2.5 Data Acquisition and Measurement System Operation
 - Frequency of measurement: Recorded continuously on strip chart or data acquisition system. Checked daily for temperatures outside operational parameters.
 - Reporting units: Degrees Fahrenheit (°F)
 - Recording process: Operators take readings and manually log data, or recorded automatically on strip chart or digital data acquisition system.
- 2.6 Data Requirements
 - Historical plant records on catalyst inlet gas temperatures.
- 2.7 Specific QA/QC Procedures:
 - Calibrate, maintain and operate instrumentation using procedures that take into account manufacturer's specifications.
 - A stack test shall be conducted on the inlet and outlet to verify the 95% destruction efficiency. Such tests will be required by 10/04/08 to verify performance rating on the oxidizers control technology.
 - The oxidizer shall be operated and maintained according to the manufacturers recommendations.
 - Verify Chart recorder calibration annually.

3. COMMENTS

- 3.1 Data Collection Frequency: Inlet temperature shall be measured continuously during the hours of operation of the oxidizer. (See Section 3.3.1.2.)

Emission Point ID Number: Fugitive-Surf. App.

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): Surface App.

Applicable Requirements

Emission Unit vented through this Emission Point: Fugitive-Surf. App.

Emission Unit Description: Miscellaneous Chemicals, Surface Application

Raw Material/Fuel: Solvents, Sealants, Adhesives

Rated Capacity: NA

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

No applicable requirements at this time.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

IV. General Conditions

This permit is issued under the authority of the Iowa Code subsection 455B.133(8) and in accordance with 567 Iowa Administrative Code chapter 22.

G1. Duty to Comply

1. The permittee must comply with all conditions of the Title V permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for a permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. *567 IAC 22.108(9)"a"*
2. Any compliance schedule shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it is based. *567 IAC 22.105 (2)"h"(3)*
3. Where an applicable requirement of the Act is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, both provisions shall be enforceable by the administrator and are incorporated into this permit. *567 IAC 22.108 (1)"b"*
4. Unless specified as either "state enforceable only" or "local program enforceable only", all terms and conditions in the permit, including provisions to limit a source's potential to emit, are enforceable by the administrator and citizens under the Act. *567 IAC 22.108 (14)*
5. It shall not be a defense for a permittee, in an enforcement action, that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. *567 IAC 22.108 (9)"b"*

G2. Permit Expiration

1. Except as provided in 567 IAC 22.104, the expiration of this permit terminates the permittee's right to operate unless a timely and complete application has been submitted for renewal. Any testing required for renewal shall be completed before the application is submitted. *567 IAC 22.116(2)*
2. To be considered timely, the owner, operator, or designated representative (where applicable) of each source required to obtain a Title V permit shall present or mail the Air Quality Bureau, Iowa Department of Natural Resources, Air Quality Bureau, 7900 Hickman Rd, Suite #1, Urbandale, Iowa 50322, two copies (three if your facility is located in Linn or Polk county) of a complete permit application, at least 6 months but not more than 18 months prior to the date of permit expiration. An additional copy must also be sent to EPA Region VII, Attention: Chief of Air Permits, 901 N. 5th St., Kansas City, KS 66101. The application must include all emission points, emission units, air pollution control equipment, and monitoring devices at the facility. All emissions generating activities, including fugitive emissions, must be included. The definition of a complete application is as indicated in 567 IAC 22.105(2). *567 IAC 22.105*

G3. Certification Requirement for Title V Related Documents

Any application, report, compliance certification or other document submitted pursuant to this permit shall contain certification by a responsible official of truth, accuracy, and completeness. All certifications shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. *567 IAC 22.107 (4)*

G4. Annual Compliance Certification

By March 31 of each year, the permittee shall submit compliance certifications for the previous calendar year. The certifications shall include descriptions of means to monitor the compliance status of all emissions sources including emissions limitations, standards, and work practices in accordance with applicable requirements. The certification for a source shall include the identification of each term or condition of the permit that is the basis of the certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for

determining the compliance status of the source, currently and over the reporting period consistent with all applicable department rules. For sources determined not to be in compliance at the time of compliance certification, a compliance schedule shall be submitted which provides for periodic progress reports, dates for achieving activities, milestones, and an explanation of why any dates were missed and preventive or corrective measures. The compliance certification shall be submitted to the administrator, director, and the appropriate DNR Field office. 567 IAC 22.108 (15)"e"

G5. Semi-Annual Monitoring Report

By March 31 and September 30 of each year, the permittee shall submit a report of any monitoring required under this permit for the 6 month periods of July 1 to December 31 and January 1 to June 30, respectively. All instances of deviations from permit requirements must be clearly identified in these reports, and the report must be signed by a responsible official, consistent with 567 IAC 22.107(4). The semi-annual monitoring report shall be submitted to the director and the appropriate DNR Field office. 567 IAC 22.108 (5)

G6. Annual Fee

1. The permittee is required under subrule 567 IAC 22.106 to pay an annual fee based on the total tons of actual emissions of each regulated air pollutant. Beginning July 1, 1996, Title V operating permit fees will be paid on July 1 of each year. The fee shall be based on emissions for the previous calendar year.
2. The fee amount shall be calculated based on the first 4,000 tons of each regulated air pollutant emitted each year. The fee to be charged per ton of pollutant will be available from the department by June 1 of each year. The Responsible Official will be advised of any change in the annual fee per ton of pollutant.
3. The following forms shall be submitted annually by March 31 documenting actual emissions for the previous calendar year.
 - a. Form 1.0 "Facility Identification";
 - b. Form 4.0 "Emissions unit-actual operations and emissions" for each emission unit;
 - c. Form 5.0 "Title V annual emissions summary/fee"; and
 - d. Part 3 "Application certification."
4. The fee shall be submitted annually by July 1. The fee shall be submitted with the following forms:
 - a. Form 1.0 "Facility Identification";
 - b. Form 5.0 "Title V annual emissions summary/fee";
 - c. Part 3 "Application certification."
5. If there are any changes to the emission calculation form, the department shall make revised forms available to the public by January 1. If revised forms are not available by January 1, forms from the previous year may be used and the year of emissions documented changed. The department shall calculate the total statewide Title V emissions for the prior calendar year and make this information available to the public no later than April 30 of each year.
6. Phase I acid rain affected units under section 404 of the Act shall not be required to pay a fee for emissions which occur during the years 1993 through 1999 inclusive.
7. The fee for a portable emissions unit or stationary source which operates both in Iowa and out of state shall be calculated only for emissions from the source while operating in Iowa.
8. Failure to pay the appropriate Title V fee represents cause for revocation of the Title V permit as indicated in 567 IAC 22.115(1)"d".

G7. Inspection of Premises, Records, Equipment, Methods and Discharges

Upon presentation of proper credentials and any other documents as may be required by law, the permittee shall allow the director or the director's authorized representative to:

1. Enter upon the permittee's premises where a Title V source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
3. Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
4. Sample or monitor, at reasonable times, substances or parameters for the purpose of ensuring compliance with the permit or other applicable requirements. *567 IAC 22.108 (15)"b"*

G8. Duty to Provide Information

The permittee shall furnish to the director, within a reasonable time, any information that the director may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee also shall furnish to the director copies of records required to be kept by the permit, or for information claimed to be confidential, the permittee shall furnish such records directly to the administrator of EPA along with a claim of confidentiality. *567 IAC 22.108 (9)"e"*

G9. General Maintenance and Repair Duties

The owner or operator of any air emission source or control equipment shall:

1. Maintain and operate the equipment or control equipment at all times in a manner consistent with good practice for minimizing emissions.
2. Remedy any cause of excess emissions in an expeditious manner.
3. Minimize the amount and duration of any excess emission to the maximum extent possible during periods of such emissions. These measures may include but not be limited to the use of clean fuels, production cutbacks, or the use of alternate process units or, in the case of utilities, purchase of electrical power until repairs are completed.
4. Schedule, at a minimum, routine maintenance of equipment or control equipment during periods of process shutdowns to the maximum extent possible. *567 IAC 24.2(1)*

G10. Recordkeeping Requirements for Compliance Monitoring

1. In addition to any source specific recordkeeping requirements contained in this permit, the permittee shall maintain the following compliance monitoring records, where applicable:
 - a. The date, place and time of sampling or measurements
 - b. The date the analyses were performed.
 - c. The company or entity that performed the analyses.
 - d. The analytical techniques or methods used.
 - e. The results of such analyses; and
 - f. The operating conditions as existing at the time of sampling or measurement.
 - g. The records of quality assurance for continuous compliance monitoring systems (including but not limited to quality control activities, audits and calibration drifts.)
2. The permittee shall retain records of all required compliance monitoring data and support information for a period of at least 5 years from the date of compliance monitoring sample, measurement report or application. Support information includes all calibration and maintenance records and all original strip chart recordings for continuous compliance monitoring, and copies of all reports required by the permit.

3. For any source which in its application identified reasonably anticipated alternative operating scenarios, the permittee shall:

- a. Comply with all terms and conditions of this permit specific to each alternative scenario.
- b. Maintain a log at the permitted facility of the scenario under which it is operating.
- c. Consider the permit shield, if provided in this permit, to extend to all terms and conditions under each operating scenario. *567 IAC 22.108(4), 567 IAC 22.108(12)*

G11. Evidence used in establishing that a violation has or is occurring.

Notwithstanding any other provisions of these rules, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any provisions herein.

1. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred at a source:

- a. A monitoring method approved for the source and incorporated in an operating permit pursuant to 567 Chapter 22;
- b. Compliance test methods specified in 567 Chapter 25; or
- c. Testing or monitoring methods approved for the source in a construction permit issued pursuant to 567 Chapter 22.

2. The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:

- a. Any monitoring or testing methods provided in these rules; or
- b. Other testing, monitoring, or information gathering methods that produce information comparable to that produced by any method in subrule 21.5(1) or this subrule. *567 IAC 21.5(1)-567 IAC 21.5(2)*

G12. Prevention of Accidental Release: Risk Management Plan Notification and Compliance Certification

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Act, the permittee shall notify the department of this requirement. The plan shall be filed with all appropriate authorities by the deadline specified by EPA. A certification that this risk management plan is being properly implemented shall be included in the annual compliance certification of this permit. *567 IAC 22.108(6)*

G13. Hazardous Release

The permittee must report any situation involving the actual, imminent, or probable release of a hazardous substance into the atmosphere which, because of the quantity, strength and toxicity of the substance, creates an immediate or potential danger to the public health, safety or to the environment. A verbal report shall be made to the department at (515) 281-8694 and to the local police department or the office of the sheriff of the affected county as soon as possible but not later than six hours after the discovery or onset of the condition. This verbal report must be followed up with a written report as indicated in 567 IAC 131.2(2). *567 IAC Chapter 131-State Only*

G14. Excess Emissions and Excess Emissions Reporting Requirements

1. Excess Emissions. Excess emission during a period of startup, shutdown, or cleaning of control equipment is not a violation of the emission standard if the startup, shutdown or cleaning is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions. Cleaning of control equipment which does not require the shutdown of the process equipment shall be limited to one six-minute period per one-hour period. An incident of excess emission (other than an incident during startup, shutdown or cleaning of control equipment) is a violation. If the owner or operator of a source maintains that the incident of excess emission was due to a malfunction, the owner or operator must show that the conditions which caused the

incident of excess emission were not preventable by reasonable maintenance and control measures. Determination of any subsequent enforcement action will be made following review of this report. If excess emissions are occurring, either the control equipment causing the excess emission shall be repaired in an expeditious manner or the process generating the emissions shall be shutdown within a reasonable period of time. An expeditious manner is the time necessary to determine the cause of the excess emissions and to correct it within a reasonable period of time. A reasonable period of time is eight hours plus the period of time required to shut down the process without damaging the process equipment or control equipment. In the case of an electric utility, a reasonable period of time is eight hours plus the period of time until comparable generating capacity is available to meet consumer demand with the affected unit out of service, unless, the director shall, upon investigation, reasonably determine that continued operation constitutes an unjustifiable environmental hazard and issue an order that such operation is not in the public interest and require a process shutdown to commence immediately.

2. Excess Emissions Reporting

- a. Oral Reporting of Excess Emissions. An incident of excess emission (other than an incident of excess emission during a period of startup, shutdown, or cleaning) shall be reported to the appropriate field office of the department within eight hours of, or at the start of the first working day following the onset of the incident. The reporting exemption for an incident of excess emission during startup, shutdown or cleaning does not relieve the owner or operator of a source with continuous monitoring equipment of the obligation of submitting reports required in 567-subrule 25.1(6). An oral report of excess emission is not required for a source with operational continuous monitoring equipment (as specified in 567-subrule 25.1(1)) if the incident of excess emission continues for less than 30 minutes and does not exceed the applicable emission standard by more than 10 percent or the applicable visible emission standard by more than 10 percent opacity. The oral report may be made in person or by telephone and shall include as a minimum the following:
- i. The identity of the equipment or source operation from which the excess emission originated and the associated stack or emission point.
 - ii. The estimated quantity of the excess emission.
 - iii. The time and expected duration of the excess emission.
 - iv. The cause of the excess emission.
 - v. The steps being taken to remedy the excess emission.
 - vi. The steps being taken to limit the excess emission in the interim period.
- b. Written Reporting of Excess Emissions. A written report of an incident of excess emission shall be submitted as a follow-up to all required oral reports to the department within seven days of the onset of the upset condition, and shall include as a minimum the following:
- i. The identity of the equipment or source operation point from which the excess emission originated and the associated stack or emission point.
 - ii. The estimated quantity of the excess emission.
 - iii. The time and duration of the excess emission.
 - iv. The cause of the excess emission.
 - v. The steps that were taken to remedy and to prevent the recurrence of the incident of excess emission.
 - vi. The steps that were taken to limit the excess emission.
 - vii. If the owner claims that the excess emission was due to malfunction, documentation to support this claim. 567 IAC 24.1(1)-567 IAC 24.1(4)

3. Emergency Defense for Excess Emissions. For the purposes of this permit, an “emergency” means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include non-compliance, to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation or operator error. An emergency constitutes an affirmative defense to an action brought for non-compliance with technology based limitations if it can be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that:

- a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;
- b. The facility at the time was being properly operated;
- c. During the period of the emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements of the permit; and
- d. The permittee submitted notice of the emergency to the director by certified mail within two working days of the time when the emissions limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken. *567 IAC 22.108(16)*

G15. Permit Deviation Reporting Requirements

A deviation is any failure to meet a term, condition or applicable requirement in the permit. Reporting requirements for deviations that result in a hazardous release or excess emissions have been indicated above (see G13 and G14). Unless more frequent deviation reporting is specified in the permit, any other deviation shall be documented in the semi-annual monitoring report and the annual compliance certification (see G4 and G5). *567 IAC 22.108(5)"b"*

G16. Notification Requirements for Sources That Become Subject to NSPS and NESHAP Regulations

During the term of this permit, the permittee must notify the department of any source that becomes subject to a standard or other requirement under 567-subrule 23.1(2) (standards of performance of new stationary sources) or section 111 of the Act; or 567-subrule 23.1(3) (emissions standards for hazardous air pollutants), 567-subrule 23.1(4) (emission standards for hazardous air pollutants for source categories) or section 112 of the Act. This notification shall be submitted in writing to the department pursuant to the notification requirements in 40 CFR Section 60.7, 40 CFR Section 61.07, and/or 40 CFR Section 63.9. *567 IAC 23.1(2), 567 IAC 23.1(3), 567 IAC 23.1(4)*

G17. Requirements for Making Changes to Emission Sources That Do Not Require Title V Permit Modification

1. Off Permit Changes to a Source. Pursuant to section 502(b)(10) of the CAAA, the permittee may make changes to this installation/facility without revising this permit if:
 - a. The changes are not major modifications under any provision of any program required by section 110 of the Act, modifications under section 111 of the act, modifications under section 112 of the act, or major modifications as defined in 567 IAC Chapter 22.
 - b. The changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or in terms of total emissions);
 - c. The changes are not modifications under any provisions of Title I of the Act and the changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or as total emissions);

- d. The changes are not subject to any requirement under Title IV of the Act.
- e. The changes comply with all applicable requirements.
- f. For such a change, the permitted source provides to the department and the administrator by certified mail, at least 30 days in advance of the proposed change, a written notification, including the following, which must be attached to the permit by the source, the department and the administrator:
 - i. A brief description of the change within the permitted facility,
 - ii. The date on which the change will occur,
 - iii. Any change in emission as a result of that change,
 - iv. The pollutants emitted subject to the emissions trade
 - v. If the emissions trading provisions of the state implementation plan are invoked, then Title V permit requirements with which the source shall comply; a description of how the emissions increases and decreases will comply with the terms and conditions of the Title V permit.
 - vi. A description of the trading of emissions increases and decreases for the purpose of complying with a federally enforceable emissions cap as specified in and in compliance with the Title V permit; and
 - vii. Any permit term or condition no longer applicable as a result of the change.

567 IAC 22.110(1)

2. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), record keeping, reporting, or compliance certification requirements. *567 IAC 22.110(2)*

3. Notwithstanding any other part of this rule, the director may, upon review of a notice, require a stationary source to apply for a Title V permit if the change does not meet the requirements of subrule 22.110(1). *567 IAC 22.110(3)*

4. The permit shield provided in subrule 22.108(18) shall not apply to any change made pursuant to this rule. Compliance with the permit requirements that the source will meet using the emissions trade shall be determined according to requirements of the state implementation plan authorizing the emissions trade. *567 IAC 22.110(4)*

5. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes, for changes that are provided for in this permit. *567 IAC 22.108(11)*

G18. Duty to Modify a Title V Permit

1. Administrative Amendment.

- a. An administrative permit amendment is a permit revision that is required to do any of the following:
 - i. Correct typographical errors
 - ii. Identify a change in the name, address, or telephone number of any person identified in the permit, or provides a similar minor administrative change at the source;
 - iii. Require more frequent monitoring or reporting by the permittee; or
 - iv. Allow for a change in ownership or operational control of a source where the director determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new permittee has been submitted to the director.
- b. The permittee may implement the changes addressed in the request for an administrative amendment immediately upon submittal of the request. The request shall be submitted to the director.

c. Administrative amendments to portions of permits containing provisions pursuant to Title IV of the Act shall be governed by regulations promulgated by the administrator under Title IV of the Act.

2. Minor Permit Modification.

a. Minor permit modification procedures may be used only for those permit modifications that do any of the following:

- i. Do not violate any applicable requirements
- ii. Do not involve significant changes to existing monitoring, reporting or recordkeeping requirements in the Title V permit.
- iii. Do not require or change a case by case determination of an emission limitation or other standard, or increment analysis.
- iv. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed in order to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include any federally enforceable emissions caps which the source would assume to avoid classification as a modification under any provision under Title I of the Act; and an alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Act.;
- v. Are not modifications under any provision of Title I of the Act; and
- vi. Are not required to be processed as significant modification.

b. An application for minor permit revision shall be on the minor Title V modification application form and shall include at least the following:

- i. A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs.
- ii. The permittee's suggested draft permit
- iii. Certification by a responsible official, pursuant to 567 IAC 22.107(4), that the proposed modification meets the criteria for use of a minor permit modification procedures and a request that such procedures be used; and
- iv. Completed forms to enable the department to notify the administrator and the affected states as required by 567 IAC 22.107(7).

c. The permittee may make the change proposed in its minor permit modification application immediately after it files the application. After the permittee makes this change and until the director takes any of the actions specified in 567 IAC 22.112(4) "a" to "c", the permittee must comply with both the applicable requirements governing the change and the proposed permit terms and conditions. During this time, the permittee need not comply with the existing permit terms and conditions it seeks to modify. However, if the permittee fails to comply with its proposed permit terms and conditions during this time period, existing permit term terms and conditions it seeks to modify may subject the facility to enforcement action.

3. Significant Permit Modification. Significant Title V modification procedures shall be used for applications requesting Title V permit modifications that do not qualify as minor Title V modifications or as administrative amendments. These include but are not limited to all significant changes in monitoring permit terms, every relaxation of reporting or recordkeeping permit terms, and any change in the method of measuring compliance with existing requirements. Significant Title V modifications shall meet all requirements of 567 IAC Chapter 22, including those for applications, public participation, review by affected states, and review by the administrator, and

those requirements that apply to Title V issuance and renewal. *567 IAC 22.111-567 IAC 22.113*
The permittee shall submit an application for a significant permit modification not later than three months after commencing operation of the changed source unless the existing Title V permit would prohibit such construction or change in operation, in which event the operation of the changed source may not commence until the department revises the permit. *567 IAC 22.105(1)"a"(4)*

G19. Duty to Obtain Construction Permits

Unless exempted under *567 IAC 22.1(2)*, the permittee must not construct, install, reconstruct, or alter any equipment, control equipment or anaerobic lagoon without first obtaining a construction permit, conditional permit, or permit pursuant to *567 IAC 22.8*, or permits required pursuant to *567 IAC 22.4* and *567 IAC 22.5*. Such permits shall be obtained prior to the initiation of construction, installation or alteration of any portion of the stationary source. *567 IAC 22.1(1)*

G20. Asbestos

The permittee shall comply with *567 IAC 23.1(3)"a"*, and *567 IAC 23.2(3)"g"* when conducting any renovation or demolition activities at the facility. *567 IAC 23.1(3)"a"*, and *567 IAC 23.2*

G21. Open Burning

The permittee is prohibited from conducting open burning, except as may be allowed by *567 IAC 23.2*. *567 IAC 23.2* except *23.2(3)"h"*; *567 IAC 23.2(3)"h" - State Only*

G22. Acid Rain (Title IV) Emissions Allowances

The permittee shall not exceed any allowances that it holds under Title IV of the Act or the regulations promulgated there under. Annual emissions of sulfur dioxide in excess of the number of allowances to emit sulfur dioxide held by the owners and operators of the unit or the designated representative of the owners and operators is prohibited. Exceedences of applicable emission rates are prohibited. "Held" in this context refers to both those allowances assigned to the owners and operators by USEPA, and those allowances supplementally acquired by the owners and operators. The use of any allowance prior to the year for which it was allocated is prohibited. Contravention of any other provision of the permit is prohibited. *567 IAC 22.108(7)*

G23. Stratospheric Ozone and Climate Protection (Title VI) Requirements

1. The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:

a. All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to § 82.106.

b. The placement of the required warning statement must comply with the requirements pursuant to § 82.108.

c. The form of the label bearing the required warning statement must comply with the requirements pursuant to § 82.110.

d. No person may modify, remove, or interfere with the required warning statement except as described in § 82.112.

2. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for MVACs in Subpart B:

a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to § 82.156.

b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply

with the standards for recycling and recovery equipment pursuant to § 82.158.

c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to § 82.161.

d. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with reporting and recordkeeping requirements pursuant to § 82.166. ("MVAC-like appliance" as defined at § 82.152)

e. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to § 82.156.

f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to § 82.166.

3. If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.

4. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant,

5. The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program. *40 CFR part 82*

G24. Permit Reopenings

1. This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. *567 IAC 22.108(9)"c"*

2. Additional applicable requirements under the Act become applicable to a major part 70 source with a remaining permit term of 3 or more years. Revisions shall be made as expeditiously as practicable, but not later than 18 months after the promulgation of such standards and regulations.

a. Reopening and revision on this ground is not required if the permit has a remaining term of less than three years;

b. Reopening and revision on this ground is not required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions have been extended pursuant to 40 CFR 70.4(b)(10)(i) or (ii) as amended to June 25, 1993.

c. Reopening and revision on this ground is not required if the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. *567 IAC 22.108(17)"a", 567 IAC 22.108(17)"b"*

3. A permit shall be reopened and revised under any of the following circumstances:
 - a. The department receives notice that the administrator has granted a petition for disapproval of a permit pursuant to 40 CFR 70.8(d) as amended to June 25, 1993, provided that the reopening may be stayed pending judicial review of that determination;
 - b. The department or the administrator determines that the Title V permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Title V permit;
 - c. Additional applicable requirements under the Act become applicable to a Title V source, provided that the reopening on this ground is not required if the permit has a remaining term of less than three years, the effective date of the requirement is later than the date on which the permit is due to expire, or the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. Such a reopening shall be complete not later than 18 months after promulgation of the applicable requirement.
 - d. Additional requirements, including excess emissions requirements, become applicable to a Title IV affected source under the acid rain program. Upon approval by the administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.
 - e. The department or the administrator determines that the permit must be revised or revoked to ensure compliance by the source with the applicable requirements. *567 IAC 22.114(1)*
4. Proceedings to reopen and reissue a Title V permit shall follow the procedures applicable to initial permit issuance and shall effect only those parts of the permit for which cause to reopen exists. *567 IAC 22.114(2)*

G25. Permit Shield

1. The director may expressly include in a Title V permit a provision stating that compliance with the conditions of the permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that:
 - a. Such applicable requirements are included and are specifically identified in the permit; or
 - b. The director, in acting on the permit application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the permit includes the determination or a concise summary thereof.
2. A Title V permit that does not expressly state that a permit shield exists shall be presumed not to provide such a shield.
3. A permit shield shall not alter or affect the following:
 - a. The provisions of Section 303 of the Act (emergency orders), including the authority of the administrator under that section;
 - b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
 - c. The applicable requirements of the acid rain program, consistent with Section 408(a) of the Act;
 - d. The ability of the department or the administrator to obtain information from the facility pursuant to Section 114 of the Act. *567 IAC 22.108 (18)*

G26. Severability

The provisions of this permit are severable and if any provision or application of any provision is found to be invalid by this department or a court of law, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected by such finding. *567 IAC 22.108 (8)*

G27. Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege. *567 IAC 22.108 (9)"d"*

G28. Transferability

This permit is not transferable from one source to another. If title to the facility or any part of it is transferred, an administrative amendment to the permit must be sought to determine transferability of the permit. *567 IAC 22.111 (1)"d"*

G29. Disclaimer

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. *567 IAC 22.3(3)"c"*

G30. Notification and Reporting Requirements for Stack Tests or Monitor Certification

The permittee shall notify the department's stack test contact in writing not less than 30 days before a required test or performance evaluation of a continuous emission monitor is performed to determine compliance with an applicable requirement. For the department to consider test results a valid demonstration of compliance with applicable rules or a permit condition, such notice shall be given. Such notice shall include the time, the place, the name of the person who will conduct the test and other information as required by the department. Unless specifically waived by the department's stack test contact, a pretest meeting shall be held not later than 15 days prior to conducting the compliance demonstration. The department may accept a testing protocol in lieu of a pretest meeting. A representative of the department shall be permitted to witness the tests. Results of the tests shall be submitted in writing to the department's stack test contact in the form of a comprehensive report within six weeks of the completion of the testing. Compliance tests conducted pursuant to this permit shall be conducted with the source operating in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which the source shall be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the equipment manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the department that the source has been physically altered so that capacity cannot be exceeded, or the department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the department to determine whether such source is in compliance.

Stack test notifications, reports and correspondence shall be sent to:

Stack Test Review Coordinator
Iowa DNR, Air Quality Bureau
7900 Hickman Road, Suite #1
Urbandale, IA 50322
(515) 242-6001

Within Polk and Linn Counties, stack test notifications, reports and correspondence shall also be directed to the supervisor of the respective county air pollution program.

567 IAC 25.1(7)"a", 567 IAC 25.1(9)

G31. Prevention of Air Pollution Emergency Episodes

The permittee shall comply with the provisions of 567 IAC Chapter 26 in the prevention of excessive build-up of air contaminants during air pollution episodes, thereby preventing the occurrence of an emergency due to the effects of these contaminants on the health of persons. *567 IAC 26.1(1)*

G32. Contacts List

The current address and phone number for reports and notifications to the EPA administrator is:

Chief of Air Permits
EPA Region 7
Air Permits and Compliance Branch
901 N. 5th Street
Kansas City, KS 66101
(913) 551-7020

The current address and phone number for reports and notifications to the department or the Director is:

Chief, Air Quality Bureau
Iowa Department of Natural Resources
7900 Hickman Road, Suite #1
Urbandale, IA 50322
(515) 242-5100

Reports or notifications to the DNR Field Offices or local programs shall be directed to the supervisor at the appropriate field office or local program. Current addresses and phone numbers are:

Field Office 1

909 West Main – Suite 4
Manchester, IA 52057
(563) 927-2640

Field Office 2

P.O. Box 1443
2300-15th St., SW
Mason City, IA 50401
(641) 424-4073

Field Office 3

1900 N. Grand Ave.
Spencer, IA 51301
(712) 262-4177

Field Office 4

1401 Sunnyside Lane
Atlantic, IA 50022
(712) 243-1934

Field Office 5

401 SW 7th Street, Suite I
Des Moines, IA 50309
(515) 725-0268

Field Office 6

1023 West Madison Street
Washington, IA 52353-1623
(319) 653-2135

Polk County Public Works Dept.

Air Quality Division
5885 NE 14th St.
Des Moines, IA 50313
(515) 286-3351

Linn County Public Health Dept.

Air Pollution Control Division
501 13th St., NW
Cedar Rapids, IA 52405
(319) 892-6000